

KAMEHAMEHA SCHOOLS

# Keauhou

KEAUHOU BAY MANAGEMENT PLAN  
FINAL ENVIRONMENTAL IMPACT STATEMENT

VOLUME II: APPENDICES



G70

September 2025





KAMEHAMEHA SCHOOLS®

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FINAL ENVIRONMENTAL IMPACT STATEMENT

**VOLUME II: APPENDICES**

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## **Table of Contents**

### **Volume II: Appendices**

- A. EISPN Scoping Meeting Minutes
- B. EISPN Comment Letters
- C. DEIS Comment Response Matrix
- D. DEIS Original Comments
- E. DEIS Notification Letter
- F. FEIS Notification Letter
- G. Stakeholder Consultation List

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Appendix A

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# **EISPN Scoping Meeting Minutes**





# CONFERENCE REPORT

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<b>TO:</b>	Kamehameha Schools		
<b>FROM:</b>	G70		
<b>DATE:</b>	April 12, 2022	<b>LOCATION:</b>	Virtual Meeting via Zoom
<b>PROJECT:</b>	Keauhou Bay Management Plan	<b>PROJECT NO:</b>	221053-01
<b>SUBJECT:</b>	EISPN Scoping Meeting	<b>NO. OF PAGES:</b>	12
<b>THOSE PRESENT:</b>	KS: Marissa Harman, Emily Davids, Crystal Kua, Jason Jeremiah, Kaimana Barcarse, Kau'i Burgess	G70: Kawika McKeague, Steven Doo, Cody Winchester, Janice Jensen	

## COMMUNITY MEMBERS PRESENT:

Alex Roy	Jackson Bauer	Loke Davis	Sherry Bracken
Alice Ray	Jessie	Manu Powers	Tyler Swain
BC	Jim Plant	Mike Perkins	Ulu Ching
Ben Rice	Jjfetter	Moto g7 play (Sarah)	Wendy
Blhod	Jolene	Olu Campbell	
Carolyn Hui	Ka'ea Lyons	Pamela Rice	
Christina	Kalani	Pete S	
Cindi Punihaole	Kalani's iPad	Peter M	
David E Smith	Kathleen Wilson	Rebecca	
Deb S	Kathy McMillen	Rebecca Villegos	
Dr. Holeka Goro Inaba	Ka'ui Burgess	Renee Schofield	
E Janes	Kekoa Kaluhiwa	Renee Schofield	
Geoff Hand	Kimmy Gay	Ryan	
Heather and Joe Mueller	L Mikahala Roy	Ryan Roberts	
Hilarie Alomar	Leiola	S Rankin	
Hodges	Lew Brentano	Samsung (unknown)	
iPad 2 (unknown)	Lisa	Shakti Stream	
iPad 3 (unknown)	Lisa and Brent Sterritt	Shandon	

## SUMMARY:

Notification that an Environmental Impact Statement (EIS) was to be prepared, known as an Environmental Impact Statement Preparatory Notice (EISPN), was published in the Environmental Review Program's The Environmental Notice on March 23, 2022 to solicit input on the scope and topics of interest of the Keauhou Bay Management Plan. Kamehameha Schools (KS) and G70 hosted a public scoping meeting to fulfill the consultation requirements as promulgated in Hawai'i Revised Statutes §11-200.1-23(d). Due to the ongoing COVID-19 pandemic, the meeting was held virtually on April 12, 2022, from 6:00-8:30pm via Zoom.

Kaimana Barcarse (KS) opened the meeting with a pule. Marissa Harmon (KS), Emily Davids (KS), and Kawika McKeague (G70) presented a slide deck describing the purpose and need for the plan, entitlements process, the scope of the EIS, the plans management goals and strategies, and preliminary design elements. After the presentation, participants were provided with an opportunity to ask questions and provide comments regarding the scope of the project. A summary of the comments provided is provided in the following section.

Commenters Name	Comment	Response
Rebecca	<ul style="list-style-type: none"> <li>• Land used and enjoyed by locals</li> <li>• Traffic issue throughout the bay</li> <li>• There is a hotel in Keauhou already. The bay doesn't need another one a block away.</li> <li>• Concern about traffic, crowding, and noise that will take away from the beauty of the bay</li> <li>• KS should focus on offering affordable housing to residents</li> <li>• I don't understand the educational point</li> </ul>	Old Kona Road designed to help alleviate congestion. The plan is focused on bringing students and kupa'āina to the bay.
Kimmy Gay	<ul style="list-style-type: none"> <li>• We play volleyball in a league down there.</li> <li>• Are you removing the volleyball court?</li> <li>• What are the kids going to do? There is no other place to play. There are only 3 volleyball courts in West Hawaii. Kids will go back to the streets instead of having a healthy outlet</li> </ul>	The volleyball court is not in KS's present vision.
Ulu Ching	<ul style="list-style-type: none"> <li>• Mahalo for providing access</li> <li>• How much emphasis is being made on business that is not orientated towards tourism.</li> </ul>	KS has not leased any spaces yet. Targeted towards local market. There will be two commercial tenants who currently operate tours in the bay. Open to general retail / commercial businesses including a restaurant. Leases will be negotiated with KS.
Lew Brentano	<ul style="list-style-type: none"> <li>• What are you anticipating for ADA compliance? Is accessibility built into this plan?</li> <li>• What is the status on Old Kona Road? Old Kona road is a good conduit as long as it's a safe ADA route.</li> </ul>	The plan intends to increase connectivity and access throughout the bay. Specific details will be evaluated as part of the DEIS.
Shakti Stream	<ul style="list-style-type: none"> <li>• Grew up playing volleyball on that court- still go and play volleyball, so does son; VP of the volleyball association</li> <li>• Last untouched place of Kona</li> <li>• Not opposed to change, but as a cultural center, there should be something for the community, not just retail space-- volleyball court is a significant space for the community; could be more beneficial than a retail area</li> </ul> <p>Court could move. It could be placed near commercial area like at Coconut Grove in Kona. The court could benefit the area more than a retail space. Court could benefit project.</p>	KS will commit to working with the association and elected officials to find another location. We realize the importance of recreation and healthy lifestyles at the bay.
Peter M	<ul style="list-style-type: none"> <li>• Applauding educational mission and efforts to provide respect for cultural significance of area. The birth site faces the dumpster and bathrooms. Needs to be cleaned up to pay respect to ali'i.</li> </ul>	KS's objective is to steward the land in perpetuity. There are no existing revenue generating uses at Bay to fund the needed stewardship. We don't want to drain on other endowment funds set

	<ul style="list-style-type: none"> <li>• Volleyball takes up a lot of real estate but not exclusive amount. Brings opportunity to folks who don't have other opportunities. It serves families of all economic spectrum.</li> <li>• Water quality is an issue (don't jump in with a cut).</li> <li>• Bridge to beach is rickety.</li> <li>• Restrooms have been closed for years. Good things are already happening.</li> <li>• If the intent is to increase kama'āina and kupu'āina access, why is this being accomplished by putting in hotel rooms and fine dining?</li> <li>• Voicing concerns about tourists overrunning one of the last places on the coasts where locals have access.</li> <li>• Proposal doesn't make sense to include resort. What are financial metrics to meet successful mission at Keauhou Bay. Is it the same for all properties. Could bungalows at another KS owned site be used to provide financial returns needed.</li> </ul>	<p>aside for education. Acceptable rate of returns have been studied. We looked at appropriate land uses as guided by General Plan and Community Development Plan and others.</p>
Moto- Sara	<ul style="list-style-type: none"> <li>• Lives above the project</li> <li>• Concern of removing a canopy of trees/shrubs/veg and replacing with pavement.</li> <li>• Concern for contamination to aquifer and increased heat.</li> </ul>	<p>These concerns will be evaluated and addressed as part of the environmental review process.</p>
David Smith	<ul style="list-style-type: none"> <li>• Director of the Keauhou Volleyball Association, son plays and got a scholarship to college-- many other students do as well.</li> <li>• The association is interested in obtaining a lease with KS.</li> <li>• Has KS considered income generation from Volleyball tournaments / workshops?</li> <li>• Can we get a written commitment that club can use court in future? Not an exclusive use. Coexists.</li> </ul>	<p>KS does not negotiate formal agreements in public settings. There is an issue with the County right-of-way that is located under the volleyball court. KS does not own all the land.</p>
Ryan Roberts	<ul style="list-style-type: none"> <li>• Concern for public / shoreline access being affected throughout the process.</li> <li>• What insurances does public have that access will be provided throughout the process.</li> <li>• Concern about access to He'eia Bay.</li> </ul>	<p>Access to the shoreline will not be disrupted during construction. The management plan will increase access. He'eia Bay is outside the project area.</p>
Kathy McMillen	<ul style="list-style-type: none"> <li>• Just because you have zoning for resort use doesn't mean it's appropriate.</li> <li>• Concerned with water quality; several oceanfront parcels on cesspool. Resort will only add to problem.</li> </ul>	<p>Impacts to traffic, drainage, and water resources will be evaluated as part of the DIES.</p>

	<ul style="list-style-type: none"> <li>• Parking will be an issue. Vendors taking up parking spaces. People will start parking on road.</li> </ul>	
Ben Rice	<ul style="list-style-type: none"> <li>• Concerned about noise, pollution and parking and how these things will be mitigated</li> <li>• More effort should be put in outreach. Many people didn't know about meeting tonight.</li> </ul>	Noise, pollution, and parking issues will be evaluated as part of the DEIS.
Mikahala	<ul style="list-style-type: none"> <li>• First restored temple in Keauhou. Serves as Kahu.</li> <li>• KS is premature in effort. Lands are sacred. Important to all mankind.</li> </ul>	KS agrees that the cultural resources in the bay are important and should be protected. This plan is designed to preserve and emphasize important resources for education.
Ulu Ching (2nd question)	<ul style="list-style-type: none"> <li>• Appreciate that KS is creating space for parking. How would fishers access the ramp? Southside boat parking is far from boat ramp.</li> </ul>	The plan is designed to open up the bayfront area and bring the focus to the cultural heritage of the bay. The designated boat parking is the most appropriate site that was identified.
BC	<ul style="list-style-type: none"> <li>• What are the plans for the canoe club? Will the Halau will be moved?</li> </ul>	KS will engage the club with a new lease. Halau will remain in place and the club will continue to have a presence at the bay.
Sally Rankin	<ul style="list-style-type: none"> <li>• Previous resident from North side of bay off Kamehameha III. Chose to move out of the area before construction started.</li> <li>• Attended previous meetings. It was obvious that no one was listening and that our quality of life would change.</li> <li>• Only way to find out about meetings is to read the newspaper, talk to neighbors, etc.</li> <li>• Concern for increased traffic. Northside paying burden for Southside congestion. Do not connect Old Kona Road across bay.</li> <li>• Retail at Keauhou Shopping Center is half empty.</li> </ul>	A traffic study is being conducted to evaluate impacts to circulation and congestion.
Leiola	<ul style="list-style-type: none"> <li>• I see this plan as overuse of the bay.</li> <li>• Water quality has diminished. The fish are no longer there.</li> <li>• Are there plans to restore the spring?</li> <li>• Honor the mauka makai trail and the hōlua slide</li> <li>• Put something in the plan with mo'olelo, pre-contact moolelo</li> <li>• Am a beneficiary of the trust, understand the economic need, but questions if this development is the right way to achieve economic needs.</li> </ul>	All the project components must work together for the plan to be successful. The resort component is important to generate revenue to fund the KS mission to preserve cultural heritage and provide educational opportunities.

The meeting concluded at approximately 8:30pm.

**Chat (screencaps):**

Peter M to Everyone

07:04 PM

PM

Hooray for Kimmy. She truly delivers Aloha to these young children who likely otherwise will be left behind. I see her working productively with these kids: they are doing healthy exercise, there's no swearing or drugs, etc.—she volunteers time for community benefit.

bc to Everyone

B

Also wondering how commercial hotel and retail space is connected to and beneficial for furthering 'educational' aspects of this development ?

David E. Smith to Everyone

07:10 PM

DE

volleyball play and through the sport community gathering has occurred at the bay for several generations (60 to 70 years ).

bc to Everyone

B

Also as a member of Keauhou Canoe Club, will the canoes be able to remain on the beach where they currently are close to the ramp for launching ?

Lisa's computer to Everyone



I believe Kimmy provides transportation to keiki from La'i'opua and other residential areas who have no way to access their cultural lands — are they not a priority over tourists? Obviously they cannot generate income the way visitors can...

Lisa's computer to Everyone

07:31 PM



Cannot the Keauhou Shopping Center be more profitable? So many underused areas... ! Why does a Royal Birthplace have to generate income?

Lisa and Brent Sterritt to Everyone

LA

Can we please move beyond the volleyball topic so we can all ask our questions?

Kimmy Gay to Everyone

KG

volleyball is important to our keiki

moto g(7) play to Everyone

MG

comment to the county at [planning@hawaiicounty.gov](mailto:planning@hawaiicounty.gov)

Lisa and Brent Sterritt to Everyone

LA

Understood - and we have heard that from several individuals -

Alice Ray to Everyone

a

Integration of cultural education with sports education and participation - not limited to volleyball, but including kayaking, paddle board, swimming, would all rightly be consistent with your mission

Lisa's computer to Everyone



Am I hearing that KS is limiting access to He'eia Bay? And that if we who live here don't like the (now blocked? Is this true?) ability to get to the shoreline, it is the County's fault? Very confused here.

moto g(7) play to Everyone

MG

yes KS has limited access to the beach at H Bay.

David E. Smith to Everyone

DE

With all respect KS' proposed development plan is NOT taking into account the historic and customary usage and rights of locals who have continuously used Keauhou bay for recreational and cultural purposes over at least the last 60 or 70 years.

Jessie to Everyone

J

The access path to He'eia Bay is open. The water is accessible. Non-native plants have been cleared out so the overgrowth is not as lush - but beach access is there.

Alice Ray to Everyone

a

the historic path along the shoreline that has been active used for at least 60 years, was recently covered up by KSBE, treating a tremendous amount of anger against the Trust, that had otherwise begin to gather appreciation of the community. I have not seen anyone tear up the naupaka, bu have seen people stumble on the new barriers, including a mom who had to leave the stroller behind, and was in jeopardy of seriously injuring her one year old baby. We have a serious difference of opinion on what is public shoreline and what is KSBE property. The EIS and shoreline survey should help straighten it out, meanwhile, let's just hope there is no serious injury to the the recent barriers being "restored" — when they have not been there for sixty years at least.

Lisa's computer to Everyone

0



I will go see, thank you Alice. This is very concerning, and makes me wonder what will happen with this proposed project.

Jessie to Everyone



To clarify, the paved access path from the road to H Bay is not blocked. The long-time path along the shore has been covered over with rock.

Alice Ray to Everyone



Yes, that is correct.

Rebecca to Everyone



Love you Mikahala! You are beautiful! Your words are true! Thank You!

Ulu Ching to Everyone



Aloha mai, will the slide deck be put on the website? Mahalo!

Ryan Roberts to Everyone



please do a safety assessment of moving boat trailer parking further from boat ramp. DLNR access and the boat trailer parking should be adjacent as is the case in other boat harbors across the state...

David E. Smith to Everyone 08:10 PM

DE Is it possible for us participants to obtain a copy of this recording ?

Emily Davids to Everyone 08:11 PM

ED Aloha Ryan, just wanted to clarify that we do not have control over the land where the existing boat trailer spaces are now nor do we have any intent in lobbying to move it. The new boat trailer spaces you see on this plan would be something that could be a potential partnership with DOBOR to provide additional boat trailer spaces, if they wish to pursue it.

Ryan Roberts to Everyone 08:12 PM

RR thanks for clarifying relative to the boat trailer parking.

Rebecca to Everyone

R Agreed, there are a lot of empty stores in Keauhou Shopping Center. Great point!

Ryan Roberts to Everyone

RR

will county/public works be upsized to deal with wastewater from proposed addition? ocean water quality... same with rainwater runoff from 210 proposed additional parking spaces (150 + 60)....

Rebecca to Everyone

R

This plan is not for the people who live here on island and in Keauhou bay. There is a hotel at the point of Keauhou already and Time Shares as well. 150 more basically hotel houses is not needed, especially when there is already hotels there.

BEN RICE to Everyone

B

If anyone who is interested in staying in touch about this proposal wants to start an email chain please contact me. If such a group already exists, please let me know as I am putting together such a list at Keauhou Resort. Ben at: benricelaw@gmail.com together

Kathy McMillen to Everyone

KM

Leila, spot on comments. Just in 30 years water quality has gotten significantly worse. That doesn't get better if we continue with stats quo.

**Appendix B**

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# **EISPN Comment Letters**



**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
<b>Agencies</b>		
<p>NPS Ala Kahakai NHT</p>	<p>Thank you for providing the Ala Kahakai National Historic Trail with the opportunity to submit comments on Prep Notice (EISPN) for the Proposed Keauhou Bay Management Plan Project, Keauhou Bay, North Kona District, Island of Hawai'i, State of Hawai'i. The National Park Service (NPS) administers the Ala Kahakai National Historic Trail (NHT), added to the National Trails System by the U.S. Congress on November 13, 2000 (Public Law 106-509). In January 2009, the Ala Kahakai NHT Comprehensive Management Plan (CMP) and EIS were adopted as policy and listed in the Federal Register. The legislation authorizing the Ala Kahakai NHT identifies an approximately 175-mile portion of prehistoric ala loa, and other trails on or parallel to the seacoast extending from Upolu Point on the northern tip of Hawaii Island down the west coast of the island around South Point to the east boundary of Hawaii Volcanoes National Park. The Ala Kahakai National Historic Trail combines surviving elements of the ala loa with segments of later alanui aupuni, which was developed on or parallel to traditional routes, mauka-makai trails, and more recent pathways and roads that create links between the historic segments. The preservation and protection of natural and cultural resources and landscapes, as well as viewscapes, are vital to the mission of the Ala Kahakai National Historic Trail.</p> <p>Ala Kahakai National Historic Trail was established to administer the preservation and protect, reestablish as necessary, and maintain the ancient coastal ala loa and associated resources and values, along with linking trails on or parallel to the shoreline. The goal is to provide high quality experience, enjoyment and education guided by Native Hawaiian protocol and etiquette while protecting the trail's natural and cultural heritage and respecting private and community interests. The 175 mile trail corridor includes those ancient and historic trail alignments found within the Keauhou Bay Project Area.</p> <p>The Keauhou Bay Management Plan Project area is located near the southern end of Ali'i Drive in North Kona. As described in the EISPN, Keauhou Bay is a small bay along the Kona Coast traditionally known as a place of ali'i residence and of pastimes such hōlua sledding and surfing. Keauhou Bay is</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We appreciate the resources and information shared. Based on recommendations in your letter as well as during the subsequent consultation meeting and site visit on October 7, 2022, two areas within the TMK: 7-8-010:044 portion of the Project Area, totaling 1.97-acres, were re-examined by Haun &amp; Associates in October, 2022, in order to locate the remains of two historic trails (Keauhou Trail: Sites 15243 and Kainaliu Trail: Site 24259). The findings of the survey are included in the 2022 Haun &amp; Associates' ARS and Site Condition Update (Appendix B) and summarized in DEIS Chapter 4.1.2.3. The historical background of these trails in relation to the overall development of the bay over time is discussed in DEIS Chapter 4.1.1.</p> <p>The two subject trails are depicted on historic maps of the area as far</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>perhaps most well known as the birth site and resuscitation site of Kauikeaouli Kaleiopapa Kuakamanalani Mahinalani Kalaninuiwaiakua Keaweawe‘ulaokalani, also known as Kamehameha III, who was the son of Kamehameha ‘Ekahi and Keōpūolani. Keauhou Bay is called out in the County General Plan as a location of natural beauty and an important coastal destination for residents and visitors alike. This is a special place.</p> <p>The primary route for the Ala Kahakai NHT from Kailua-Kona to Keauhou is Ali‘i Drive, the location of the ancient <i>ala loa/alanui aupuni</i>. Previous development of the Keauhou Bay area rerouted Ali‘i Drive from its original location to the current alignment further inland. The preferred route of the Ala Kahakai NHT in this area includes Kamehameha III Road from Ali‘i Drive to Keauhou Bay connecting back to the current Ali‘i Drive alignment via Kaleopapa Street. Ala Kahakai NHT will work with the County, Kamehameha Schools, and other stakeholders to mark this route as the Ala Kahakai NHT.</p> <p>Ala Kahakai NHT requests that the applicant acknowledges, preserves, and protects the existing ancient and historic trails within the project area and discusses the findings in the forthcoming DEIS. The alignments of the Old Government Road (OGR), The Old Road to Kainaliu, and the Keauhou Trail are known significant trails present within the project area.</p> <p><b>Old Government Road (Beach Road)</b></p> <p>Recommendation: Honor the alignment of the Old Government Road by designing better continuity for pedestrian access flow, connecting Kamehameha III Road and Kaleiopapa Road.</p> <p>Recommendation: As part of the project area trail network discussed in the EISPN and community meeting, please consider including the interpretation of the <i>alanui aupuni (OGR)/ala loa</i> as part of the overall interpretation of this special place.</p> <p><b>Old Kona Road and Old Cart Road to Kainaliu (SHPD site No. 24259)</b></p> <p>Recommendation: Verify archaeological evidence for any remnant precursor trail that escaped the construction of the Old Kona Road, combined with historical map references. Include onsite consultation with Nā Ala Hele and Ala Kahakai NHT staff.</p>	<p>back as 1885. Aerial imagery of the Keauhou Bay area taken in 1954 show that these trails alignments had remained intact until at least that time. However, the trails do not appear in any subsequent aerial images likely due to the Project Area having been mechanically disturbed and overgrown with vegetation. Using the 1954 aerial imagery, the locations of the two historic trail alignments were cleared of vegetation and systematically examined by Haun &amp; Associates archaeologists.</p> <p>An approximately 1.26-acre corridor was cleared of vegetation and surveyed along the historic Keauhou Trail alignment (Site 15243). The ground surface within this corridor showed evidence of past mechanical grubbing and no remnants of the Keauhou Trail were present.</p> <p>An approximately .71-acre corridor encompassing the alignment of the historic Kainaliu Trail (Site 24259) was cleared of vegetation and surveyed. This corridor also showed evidence of grubbing with the presence of several linear mounds created by bulldozer blades. No</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>Recommendation: Verify archaeological evidence for the remains of the Old Cart Road to Kainaliu, combined with historical map references. Consider incorporating the trail alignment into the interpretive path network.</p> <p><b>Keauhou Trail (SHPD site No. 15243)</b></p> <p>Recommendation: Verify archaeological evidence for any trail remains, combined with historical map references. Include onsite consultation with Nā Ala Hele and Ala Kahakai NHT staff.</p> <p>Recommendation: Honor the alignment of the Keauhou Trail, even if archaeological evidence has been displaced. Consider utilizing the trail corridor as a pedestrian access incorporated into the interpretive path network.</p> <p>The National Park Service thanks the Group 70 and the Kamehameha Schools for recognizing Ala Kahakai NHT in the forthcoming Keauhou Bay Management Plan DEIS. Ala Kahakai NHT is looking forward to working with the landowners and communities of North Kona to continue managed access along this unique and important section of the Ala Kahakai NHT corridor.</p> <p>Thank you for the opportunity to provide these comments. We look forward to our continuing communication on this proposed project. Please contact me, 808-217-0307, or our resource staff archeologist, Rick Gmirkin, at 808-430-5213 to discuss any questions you may have on our comments.</p>	<p>remnant of the Kainaliu Trail was observed.</p> <p>The KBMP includes actions to honor the alignments of historic trails throughout the property. The planned network of new and improved walking paths throughout the Project Area will increase pedestrian access and provide an intact north-south pathway through the entire site to help recreate the experience of walking along the historic Old Government Road. The KBMP also calls for the re-establishment of the Old Kona Road as a public access vehicular easement, thereby re-opening a historic path that had become overgrown with vegetation and fallen into disuse. The mauka-makai walking experience of the historic Keauhou Trail will also be honored through the establishment of the recreation corridor. This open space corridor area will allow for bay visitors to freely walk from the coastline up to the Old Kona Road. The open space recreation corridor also connects to the network of walking paths situated both above and below 'Ahu'ula Cliff. The history and significance of the known historic trails will be incorporated</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>into interpretive elements along the walking path network. Please see DEIS Chapter 3.2 for a detailed description of the KBMP. DEIS Chapter 4.11 discusses anticipated impacts of the KBMP on pedestrian patterns and circulation.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>State Department of Defense</p>	<p>Thank you for the opportunity to comment on the above project. The State of Hawaii Department of Defense has no comments to offer relative to the project. Should there be any questions, please contact me at 808-369-3490 or <a href="mailto:tad.t.nakayama@hawaii.gov">tad.t.nakayama@hawaii.gov</a>.</p>	<p>Thank you for your letter dated April 18, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge that the Department of Defense, Engineering Office, has no comments at this time.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>State DLNR CWRM</p>	<p>Thank you for the opportunity to review the subject document. The Commission on Water Resource Management (CWRM) is the agency responsible for administering the State Water Code (Code). Under the Code, all waters of the State are held in trust for the benefit of the citizens of the State, therefore all water use is subject to legally protected water rights. CWRM strongly promotes the efficient use of Hawaii's water resources through conservation measures and appropriate resource management. For more information, please refer to the State Water Code, Chapter 174C, Hawaii Revised Statutes, and Hawaii Administrative Rules, Chapters 13-167</p>	<p>Thank you for your letter dated May 6, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. The following responses are offered to your comments.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>to 13-171. These documents are available via the Internet at <a href="http://dlnr.hawaii.gov/cwrm">http://dlnr.hawaii.gov/cwrm</a>.</p> <p>Our comments related to water resources are checked off below.</p> <ul style="list-style-type: none"> <li>• We recommend coordination with the county to incorporate this project into the county's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.</li> <li>• We recommend that water efficient fixtures be installed and water efficient practices implemented throughout the development to reduce the increased demand on the area's freshwater resources. Reducing the water usage of a home or building may earn credit towards Leadership in Energy and Environmental Design (LEED) certification. More information on LEED certification is available at <a href="http://www.usgbc.org/leed">http://www.usgbc.org/leed</a>. A listing of fixtures certified by the EAP as having high water efficiency can be found at <a href="http://www.epa.gov/watersense">http://www.epa.gov/watersense</a>.</li> <li>• We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. Stormwater management BMPs may earn credit toward LEED certification. More information on stormwater BMPs can be found at <a href="http://planning.hawaii.gov/czm/initiatives/low-impact-development/">http://planning.hawaii.gov/czm/initiatives/low-impact-development/</a></li> <li>• We recommend the use of alternative water sources, wherever practicable.</li> <li>• We recommend participating in the Hawaii Green Business Program, that assists and recognizes businesses that strive to operate in an environmentally and socially responsible manner. The program description can be found online at <a href="http://energy.hawaii.gov/green-business-program">http://energy.hawaii.gov/green-business-program</a>.</li> <li>• We recommend adopting landscape irrigation conservation best management practices endorsed by the Landscape Industry Council of Hawaii. These practices can be found online at</li> </ul>	<p>Potential land erosion due to the implementation of the KBMP has been addressed in the Draft Environmental Impact Statement (DEIS). DEIS Section 4.5, describes stormwater runoff peak flow estimates for both existing conditions and with project implementation. At present, portions of the KS properties at Keauhou Bay are unmanaged and susceptible to runoff and erosion. The Project is expected to result in long-term benefits as permanent sediment control measures and stormwater infrastructure would minimize runoff and erosion. Those strategies may include but are not limited to detaining, retaining and infiltrating runoff into the ground.</p> <p>Although an operator for the resort has not yet been identified, KS will encourage the use of water efficient practices and alternative water sources whenever practical. Water conservation measures will be implemented in design of the Project and may include, but not be limited to, the following: efficient irrigation systems such a drip system and moisture sensors, utilization of non-potable water for irrigation, drought tolerant plants,</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p><a href="http://www.hawaiiscape.com/wp-content/uploads/2013/04/LICH_Irrigation_Conservation_BMPs.pdf">http://www.hawaiiscape.com/wp-content/uploads/2013/04/LICH_Irrigation_Conservation_BMPs.pdf</a></p> <p>There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.</p>	<p>and the use of Water Sense-labeled ultra-low flow water fixtures and toilets. The County Department of Water Supply (DWS) will continue to be consulted as the Project design progresses. Final construction drawings will be reviewed and approved by DWS and the Hawai'i Fire Department.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>State DLNR DOBOR</p>	<p>We have no objections.</p>	<p>Thank you for your letter dated April 21, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge that the Department of Boating and Ocean Recreation has no objections at this time.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>State DLNR DOFAW</p>	<p>The Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW) has received your request for comments on the EISPN regarding the proposed KBMP for the subject parcels located in Keauhou, on the island of Hawai'i; TMK: (3) 7-8-012:Various &amp; (3) 7-8-010:Various. The proposed project consists of reorienting uses at the bay and establishing new place-based cultural education and revenue-generating opportunities. Management strategies include establishing a Heritage Management Corridor, repositioning and developing commercial bayfront areas and</p>	<p>Thank you for your letter dated April 25, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>appropriate density resort area, reorienting recreational and community use, maintaining and establishing new place-based cultural-educational areas, and managing vehicle, boat, and pedestrian circulation and wayfinding.</p> <p>The State listed Hawaiian Hoary Bat or 'Ōpe'ape'a (<i>Lasiurus cinereus semotus</i>) could potentially occur in the vicinity of the project and may roost in nearby trees. Any required site clearing should be timed to avoid disturbance to bats during their birthing and pup rearing season (June 1 through September 15). During this period woody plants greater than 15 feet (4.6 meters) tall should not be disturbed, removed, or trimmed. Barbed wire should also be avoided for any construction because bats can become ensnared and killed by such fencing during flight.</p> <p>Artificial lighting can adversely impact seabirds that may pass through the area at night by causing disorientation. This disorientation can result in a collision with manmade structures or the grounding of birds. For nighttime work that might be required, DOFAW recommends that all lights used to be fully shielded to minimize the attraction of seabirds. Nighttime work that requires outdoor lighting should be avoided during the seabird fledging season from September 15 through December 15. This is the period when young seabirds take their maiden voyage to the open sea. Permanent lighting also poses a risk of seabird attraction, and as such should be minimized or eliminated to protect seabird flyways and preserve the night sky. For illustrations and guidance related to seabird-friendly light styles that also protect seabirds and the dark starry skies of Hawai'i please visit <a href="https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf">https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf</a>.</p> <p>State listed waterbirds such as the Hawaiian Duck (<i>Anas wyvilliana</i>), Hawaiian Stilt (<i>Himantopus mexicanus knudseni</i>), Hawaiian Coot (<i>Fulica alai</i>), and Hawaiian Goose or Nēnē (<i>Branta sandvicensis</i>) the potential to occur in the vicinity of the proposed project site. It is against State law to harm or harass these species. If any of these species are present during construction activities, then all activities within 100 feet (30 meters) should cease, and the bird should not be approached. Work may continue after the bird leaves the area of its own accord. If a nest is discovered at any point, please contact the Hawai'i Island Branch DOFAW Office at (808) 974-4221.</p>	<p>We appreciate the references you have provided relating to endangered species. A Natural Resource Assessment was conducted for the Draft EIS (DEIS) by AECOS (Appendix C). Please refer to Section 4.6 of the DEIS for discussion of native species, endangered species, and critical habitat in relation to the KBMP. The Project Area has been heavily infiltrated by non-native and invasive species. As discussed in the Natural Resource Assessment, no species listed as threatened or endangered by state or federal statutes were identified on any of the project parcels at Keauhou Bay. The potential exists that several listed species might transit or utilize the general area on occasion. For further discussion on potential impacts and mitigation measures, please refer to section 4.6 of the DEIS.</p> <p>Methods for removal of non-native species and native plant restoration along with appropriate mitigation measures for the protection of endangered species are identified in the study.</p> <p>Short-term construction related activity will involve clearing and</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>The State listed Hawaiian Hawk or 'lo (<i>Buteo solitarius</i>) may occur in the project vicinity. DOFAW recommends surveying the area to ensure no Hawaiian Hawk nests are present if trees are to be cut. 'lo nests may be present during the breeding season from March to September.</p> <p>The State endangered Hawaiian Monk Seal (<i>Monachus schauinslandi</i>) and threatened Green Sea Turtle (<i>Chelonia mydas</i>) may potentially occur or haul out on shore within the vicinity of the proposed project site. If either species is detected within 100 meters of the project area all nearby construction operations should cease and not continue until the focal animal has departed the area on its own accord.</p> <p>The project area falls within or is encompassed the historic range of the State listed Blackburn's Sphinx Moth (BSM; <i>Manduca blackburni</i>). Larvae of BSM feed on many nonnative hostplants that include tree tobacco (<i>Nicotiana glauca</i>) which grows in disturbed soil. We recommend contacting our Hawai'i Island Branch DOFAW office at (808) 974-4221 for further information about where BSM may be present and whether a vegetation survey should be conducted to determine the presence of plants preferred by BSM. DOFAW recommends removing plants less than one meter in height or during the dry time of the year to avoid harm to BSM. If you intend to either remove tree tobacco over one meter in height or to disturb the ground around or within several meters of these plants, they must be thoroughly inspected by a qualified biologist for the presence of BSM eggs and larvae.</p> <p>The proposed project work near Ho'okūkū Pond and the Kūhalalua Spring could affect State endangered native Hawaiian damselflies (<i>Megalagrion</i> spp.) and anchialine shrimp species that might potentially occur in these water features within the project site. Therefore, DOFAW recommends that a survey be conducted by a qualified entomologist to determine if listed damselflies and anchialine shrimps are present in the project area and to assess any potential impacts to those species.</p> <p>DOFAW recommends minimizing the movement of plant or soil material between worksites, such as in fill. Soil and plant material may contain invasive fungal pathogens (e.g., Rapid 'Ōhi'a Death), vertebrate and invertebrate pests (e.g., Little Fire Ants, Coconut Rhinoceros Beetles), or</p>	<p>preparing the Project Area for the phased build out of the Project. Plant species identified within the Project Area are consistent with those found in urban environments which are common non-native introduced species and scattered weedy growth. To avoid the unintentional introduction or transportation of invasive plant species during the short-term construction period, construction equipment, materials, and personnel will be cleaned of excess soil and debris to minimize the risk of spreading invasive species. The Project has been designed to ensure that the physical attributes of new development are compatible with the existing landscape. The landscape design integrates native plants and landscaping elements that are representative of the natural and cultural landscape. The landscape design also incorporates xeriscape techniques that complements the dry climate, pays tribute to the region's agricultural past, and incorporates planting of native vegetation.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>invasive plant parts that could harm our native species and ecosystems. We recommend consulting the Big Island Invasive Species Committee (BIISC) at (808) 933-3340 in planning, design, and construction of the project to learn of any high-risk invasive species in the area and ways to mitigate spread. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species. Gear that may contain soil, such as work boots and vehicles, should be thoroughly cleaned with water and sprayed with 70% alcohol solution to prevent the spread of Rapid 'Ōhi'a Death and other harmful fungal pathogens.</p> <p>To prevent the spread of Rapid 'Ōhi'a Death (ROD), if 'ōhi'a trees are present and will be removed, trimmed, or potentially injured DOFAW requests that the information and guidance at the following website be reviewed and followed: <a href="https://cms.ctahr.hawaii.edu/rod">https://cms.ctahr.hawaii.edu/rod</a>.</p> <p>DOFAW is concerned about attracting vulnerable birds to areas that may host nonnative predators such as cats, rodents, and mongoose. Additionally, improvements to the bay area are likely to increase the number of users and may generate more trash. We recommend taking action to minimize predator presence; remove cats, place bait stations for rodents and mongoose, and provide covered trash receptacles.</p> <p>DOFAW recommends using native plant species for landscaping that are appropriate for the area (i.e. climate conditions are suitable for the plants to thrive, historically occurred there, etc.). Please do not plant invasive species. DOFAW recommends consulting the Hawai'i-Pacific Weed Risk Assessment website to determine the potential invasiveness of plants proposed for use in the project (<a href="https://sites.google.com/site/weedriskassessment/home">https://sites.google.com/site/weedriskassessment/home</a>). We recommend that you refer to <a href="http://www.plantpono.org">www.plantpono.org</a> for guidance on selection and evaluation for landscaping plants.</p> <p>We appreciate your efforts to work with our office for the conservation of our native species. Should the scope of the project change significantly, or should it become apparent that threatened or endangered species may be impacted, please contact our staff as soon as possible. If you have any questions,</p>	<p>Thank you for your participation in the environmental review process.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>please contact Paul Radley, Protected Species Habitat Conservation Planning Coordinator at (808) 295-1123 or paul.m.radley@hawaii.gov.</p>	
<p>State DLNR DOFAW – Na Ala Hele</p>	<p>The Nā Ala Hele Trails and Access Program within the Division of Forestry and Wildlife, Department of Land and Natural Resources, thanks you for the opportunity to comment on the subject EISPN for the Keauhou Bay Management Plan. We are pleased to see Kamehameha Schools taking actions to protect the sensitive heritage sites in the area and provide interpretation while at the same time easing the congestion and overuse of the area.</p> <p>As the project proposal will potentially impact several historic features, including trails, as well as impact public access, our recommendations are as follows:</p> <p><b>Keauhou Trail (SHPD site No. 15243):</b></p> <p>The Keauhou Trail is a historic trail that has served as one of the main mauka-makai access trails for the Keauhou ahupua‘a for centuries, as shown on boundary survey maps of the mid-1800s and even earlier though oral histories. As such, per the Highways Act of 1892 (codified into State law, HRS 264), the trail alignment continues to be owned by the State of Hawai‘i (with the exception of the portions realigned in 2003 for the Bay View Estates project). Within the subject project area, there are various historical alignments, some depicting the trail running straight, and others depicting the trail curving south above the Old Kona Road before heading mauka again. The Management Plan recommendation B4 for a “commercial kīpuka” is concerning due to the potential impacts to the trail alignment and its continual use as publicly accessible land. Additionally, there is historical record of a “Kau Cemetery” area in that same B4 zone. (See Exhibit A and B.)</p> <p><u>Recommendation:</u> Verify any archaeological evidence for any trail remains, combined with historical map references. Include onsite consultation with Nā Ala Hele staff.</p> <p><u>Recommendation:</u> Honor the alignment of the Keauhou Trail, even if archaeological evidence has been displaced. Consider utilizing the trail</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan prepared pursuant to Hawai‘i Revised Statutes Chapter 343.</p> <p>We appreciate the resources and information shared. Based on recommendations in your letter as well as during the subsequent consultation meeting and site visit on October 7, 2022, two areas within the TMK: 7-8-010:044 portion of the Project Area, totaling 1.97-acres, were re-examined by Haun &amp; Associates in October, 2022, in order to locate the remains of two historic trails (Keauhou Trail: Sites 15243 and Kainaliu Trail: Site 24259). The findings of the survey are included in the 2022 Haun &amp; Associates’ ARS and Site Condition Update (Appendix B) and summarized in DEIS Chapter 4.1.2.3. The historical background of these trails in relation to the overall development of the bay over time is discussed in DEIS Chapter 4.1.1.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>corridor as a pedestrian access incorporated into the interpretive path network. Consult with Nā Ala Hele staff on interpretive signage content.</p> <p><u>Recommendation:</u> As part of the re-establishment of the Old Kona Road, mark the crossing of the Keauhou Trail with inlaid natural, native stone pavers.</p> <p><b>Old Kona Road and Old Cart Road to Kainaliu (SHPD site No. 24259):</b></p> <p>Management Plan recommendation E3 proposes to re-establish the Old Kona Road. While this will indeed alleviate vehicular congestion near the coastal sites, special care should be taken in this endeavor as a portion of this road is also a historic trail (site 24259) documented in maps as early as 1885. (See Exhibit C.) We acknowledge that the portion of this trail within the subject project area was sold by the State to Kamehameha Schools via quitclaim deed in 1969, however, the portion mauka of Ali'i Drive to the upland Kainaliu village continues to be owned by the State of Hawai'i, per the Highways Act of 1892 (codified into State law, HRS 264).</p> <p><u>Recommendation:</u> Verify any archaeological evidence for any remnant precursor trail that escaped the construction of the Old Kona Road, combined with historical map references. Include onsite consultation with Nā Ala Hele staff.</p> <p><u>Recommendation:</u> Include the re-established Old Kona Road as a public access vehicular easement.</p> <p>Just past the junction with the Keauhou Trail, the alignment of site 24259 continues mauka at a diagonal up to the old mauka village of Kainaliu, where the Old Kona Road continues to round the bay. (See Exhibits A, B, and C.). The "Boutique Resort" (Management Plan recommendation B3) will therefore impact this alignment. With modern County building codes, even with a post-and-pier design, there will need to be substantial grading to create the "Boutique Resort" and its associated infrastructure.</p> <p><u>Recommendation:</u> Honor the alignment of the Kainaliu Trail, even if archaeological evidence has been displaced. Consider incorporating the trail alignment into the interpretive path network.</p>	<p>The two subject trails are depicted on historic maps of the area as far back as 1885. Aerial imagery of the Keauhou Bay area taken in 1954 show that these trails alignments had remained intact until at least that time. However, the trails do not appear in any subsequent aerial images likely due to the Project Area having been mechanically disturbed and overgrown with vegetation. Using the 1954 aerial imagery, the locations of the two historic trail alignments were cleared of vegetation and systematically examined by Haun &amp; Associates archaeologists.</p> <p>An approximately 1.26-acre corridor was cleared of vegetation and surveyed along the historic Keauhou Trail alignment (Site 15243). The ground surface within this corridor showed evidence of past mechanical grubbing and no remnants of the Keauhou Trail were present.</p> <p>An approximately .71-acre corridor encompassing the alignment of the historic Kainaliu Trail (Site 24259) was cleared of vegetation and surveyed. This corridor also showed evidence of grubbing with the presence of several linear mounds</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>Incorporate the alignment as part of the pedestrian infrastructure for “Boutique Resort”. Consult with Nā Ala Hele staff on interpretive signage content.</p> <p><b>Old Government Road (Beach Road)</b></p> <p>The Old Government Road along the bay of Keauhou is an ancient trail that linked the many villages along the coast, as evidenced by many early maps, archeological features, and oral histories. Certain sections have “evolved” into modern roads (like Ali’i Drive through Kailua), while other sections are remarkably preserved (like through Kuamo’o). Within the subject area, the continuous access from north to south along this trail corridor has been obscured by auxiliary activities.</p> <p><u>Recommendation:</u> Honor the alignment of the Old Government Road by designing better continuity for pedestrian access flow, connecting Kamehameha III Road and Kaleiopapa Road. Uphold the commitments of the 2003 MOA and the resulting Cultural Trails Plan. Include onsite consultation with Nā Ala Hele staff.</p> <p><b>Consulted Parties</b></p> <p>Chapter 8 of the EISPN lists the proposed agencies to be consulted in the drafting of the DEIS. Per HRS 198-D, the Nā Ala Hele Trail and Access Program “shall serve as the centralized information agency for matters relating to the trail and access program.” Additionally, per a 2003 MOA between the DLNR and Kamehameha Schools, “NAH has a compelling public purpose to collaborate with [Kamehameha Schools] on the design, landscaping and buffer treatments, and public access for the Keauhou Historic Trail System” and “[Kamehameha Schools] will consult with the Nā Ala Hele staff and the Advisory Council as they develop the overall trail plan for the Resort.”</p> <p><u>Recommendation:</u> Add the Nā Ala Hele Trail and Access Program to the list of consulting agencies, under the Department of Land and Natural Resources. Correspondence and notifications can be directed to Jackson Bauer, Hawai’i Island Trail and Access Program Manager, as detailed below.</p>	<p>created by bulldozer blades. No remnant of the Kainaliu Trail was observed.</p> <p>The KBMP includes actions to honor the alignments of historic trails throughout the property. The planned network of new and improved walking paths throughout the Project Area will increase pedestrian access and provide an intact north-south pathway through the entire site to help recreate the experience of walking along the historic Old Government Road. The KBMP also calls for the re-establishment of the Old Kona Road as a public access vehicular easement, thereby re-opening a historic path that had become overgrown with vegetation and fallen into disuse. The mauka-makai walking experience of the historic Keauhou Trail will also be honored through the establishment of the recreation corridor. This open space corridor area will allow for bay visitors to freely walk from the coastline up to the Old Kona Road. The open space recreation corridor also connects to the network of walking paths situated both above and below ‘Ahu’ula Cliff. The history and significance of the known</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p><u>Recommendation</u>: Present the proposed Management Plan at a meeting of the Nā Ala Hele Advisory Council, per the 2003 MOA. Contact Jackson Bauer, Hawai'i Island Trail and Access Program Manager, as detailed below, to arrange this.</p> <p>Thank you for the opportunity to comment on the subject EISPN for the Keauhou Bay Management Plan. Please feel free to contact me at 808-657-8041 or <a href="mailto:jackson.m.bauer@hawaii.gov">jackson.m.bauer@hawaii.gov</a> to discuss any questions or comments you may have.</p>	<p>historic trails will be incorporated into interpretive elements along the walking path network. Please see DEIS Chapter 3.2 for a detailed description of the KBMP. DEIS Chapter 4.11 discusses anticipated impacts of the KBMP on pedestrian patters and circulation.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>State DLNR Land Division</p>	<p>We have no comments.</p>	<p>Thank you for your letter dated March 23, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan prepared pursuant to Hawai'i Revised Statues Chapter 343.</p> <p>We acknowledge that the Department of Land and Natural Resources, Land Division, has no comments at this time.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>State Department of Health – Indoor and Radiological Branch</p>	<p>Thank you for your submittal requesting comments for the Environmental Impact Statement Preparation Notice (EISPN) for the Kamehameha Schools (KS) Keauhou Bay Management Plan, Keauhou, Hawaii Island, Hawaii.</p> <p>Project activities shall comply with the following Administrative Rules of the Department of Health:</p> <ul style="list-style-type: none"> <li>• Chapter 11-39: Air Conditioning &amp; Ventilating</li> <li>• Chapter 11-41: Lead-based Paint Activities</li> <li>• Chapter 11-45: Radiation Noise Control</li> </ul>	<p>Thank you for your letter dated March 28, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan prepared pursuant to Hawai'i Revised Statues Chapter 343.</p> <p>The Project will comply with all listed Administrative Rules of the</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<ul style="list-style-type: none"> <li>• Chapter 11-46: Community Noise Control</li> <li>• Chapter 11-501 Asbestos Requirements</li> <li>• Chapter 11-504: Asbestos Abatement Certification Program</li> </ul> <p>Should you have any questions, please contact me at (808)-586-4700.</p>	<p>Department of Health in order to ensure the health and safety of bay guests as well as the environment.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>State Department of Health- Wastewater Branch</p>	<p>Thank you for allowing us the opportunity to provide comments for the subject project. It is our understanding that the project area will be served by the He'eia Wastewater Treatment Plant (WWTP). A wastewater flow analysis should be conducted to ensure that the He'eia WWTP can handle the additional wastewater flows from the subject development.</p> <p>Please be informed that the proposed wastewater systems for the subdivision/development may have to include design considerations to address any effects associated with the construction of and/or discharges from the wastewater systems to any public trust, Native Hawaiian resources or the exercise of traditional cultural practices. All wastewater plans must conform to applicable provisions of the Hawaii Administrative Rules, Chapter 11-62, "Wastewater Systems."</p> <p>Should you have any questions, please call Mr. Mark Tomomitsu of my staff at (808) 586-4294.</p>	<p>Thank you for your letter dated April 18, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan prepared pursuant to Hawai'i Revised Statutes Chapter 343. The following responses are offered to your comments.</p> <p>A wastewater flow analysis has been conducted as part of the analysis for the Draft Environmental Impact Statement (DEIS). The flow projections are based on land use areas, unit counts and estimated population using demand rates from the State HAR Chapter 11-62, Appendix D. As described in DEIS Section 4.12.2, the Project is expected to generate an average daily flow of 50,925 gallons per day (GPD).</p> <p>It is expected that the He'eia Wastewater Treatment Plant (WWTP) will have capacity to accommodate the increase in wastewater flows. Further study will</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>be needed to find out if any capital improvements of the WWRF and facilities leading up to it will need improvements with this increase in flow. All wastewater plans will conform to applicable provisions of the Hawaii Administrative Rules, Chapter 11-62, "Wastewater Systems."</p> <p>Thank you for your participation in the environmental review process.</p>
<p>State Office of Planning and Sustainable Development</p>	<p>Thank you for the opportunity to provide comments on the Environmental Impact Statement Preparation Notice (EISPN) for the Keauhou Bay Management Plan.</p> <p>The notification request was sent via memo dated March 18, 2022. It is our understanding that Kamehameha Schools (KS) proposes a Keauhou Bay Management Plan (KBMP) on approximately 29 acres at Keauhou Bay, Hawai'i Island. The KBMP proposes a place-based cultural educational center. In the management plan, the existing commercial operations will be relocated to new facilities in more appropriate locations. The proposed management plan will focus on cultural stewardship, bayfront access for the public, and educational opportunities.</p> <p>The Office of Planning and Sustainable Development (OPSD) has reviewed the transmitted material, and has the following comment to offer:  <u>Shoreline Setback Certification and Variances</u></p> <p>The EISPN lists the need for a SMA Use Permit from the County of Hawai'i. Based on the limited amount of information in the review material, it is unclear if any of the proposed actions will involve actions near or within the shoreline. We recommend that KS consult with the County of Hawai'i Planning Department for shoreline setback requirements regarding proposed activities, if any, that may be located in the shoreline area.</p> <p>If you have any questions or concerns regarding this comment letter, please</p>	<p>Thank you for your letter dated March 18, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan prepared pursuant to Hawai'i Revised Statutes (HRS) Chapter 343. The following responses are offered to your comments.</p> <p>Chapter 3 of the Draft Environmental Impact Statement (DEIS) provides a detailed description of the proposed Project and describes actions occurring near or within the shoreline area. All proposed activities will be completed in accordance with HRS 205A, Coastal Zone Management, and County of Hawai'i SMA guidelines. KS will continue to consult with the County of Hawai'i Planning Department throughout</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>contact Joshua Hekekoa of our office at (808) 587-2845.</p>	<p>the HRS 343 and SMA process to determine if any development activities require a shoreline setback variance.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>County Department of Water Supply</p>	<p>We have re viewed the subject Environmental Impact Statement Preparation Notice and have the following comments.</p> <p>Please be informed that there is an existing 12-inch waterline along Kaleiopapa Street. There are four (4) existing services for some of the subject parcels (Account Nos. 850-1110, 850-11350, 850-11360, and 850-11c 90). Each service has a 5/8-inch meter, which allows an average daily usage of 400 gallons. The Department will note that the average daily water' usage for each service, over the past two (2) years, is more than the allowed amount and exceeds the capacity of the existing meter. Any usage beyond the allowed use will need to be accounted as additional water needed for the project.</p> <p>Please be informed that the applicant has assigned 101 units of water to TMK 7-8-010:044 through an executed Water Agreement with the Water Board, dated April 4, 2012. Additional water could be made available subject to the Water Board's approval.</p> <p>The Department requests that the applicant submit more detailed estimated average daily water demand calculations. The calculations must be prepared by a professional engineer licensed in the State of Hawai'i and should include the number of fixture units (and corresponding gallons per minute demand) for the proposed facilities, as recommended by the adopted Uniform Plumbing Code. The calculations should also include the total estimated average daily water demand (GPD) for the proposed facilities by each service.</p> <p>Based on the calculations provided, the Department will determine the appropriate service connection size(s), facilities charges due, and other requirements for water service.</p>	<p>Thank you for your letter dated April 20, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan prepared pursuant to Hawai'i Revised Statutes (HRS) Chapter 343. The following responses are offered to your comments.</p> <p>Thank you for the information regarding the existing water utilities. Section 4.12.1 of the Draft Environment Impact Statement (DEIS) provides detailed estimates of the average daily water demand for the various project components. In total, the Project will result in an average water demand of approximately 97,466.2 GPD which is equivalent to 240 water credits from DWS.</p> <p>KS understands the current assigned water credits designated for the property and is working with</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>We will also require that plans be submitted. prepared by a professional engineer licensed in the State of Hawai i, showing the appropriate service lateral installation(s). A reduced pressure type backflow prevention assembly must be installed within five (5) feet of the meter(s) on private property and the installation shall be inspected and approved before water service can be activated.</p> <p>Please note that the Department of Water Supply acknowledges that potable water is Hawai Island's most precious resource and encourages our communities to promote water conservation and reserve the highest equality of water for the most valuable end use, which is the sustenance of life.</p> <p>The Department recommends that the applicant consider appropriate landscape so that additional potable water is not required. Water for landscape irrigation should be provided by alternate methods (i.e. rainwater' catchment, reclaimed or reuse water). The County of Hawai'i, Department of Public Works, and/or State of Hawai'i, Department of Health has guidelines, recommendations. or regulations. regarding these types of systems.</p> <p>Should there be any questions, please contact Mr. Ryan Quitoriano of our Water Resources and Planning Branch at (808) 961-8070, extension 256.</p>	<p>DWS to allocate the necessary water credits for this project.</p> <p>Water conservation measures will be implemented in design of the Project and may include, but not be limited to, the following: efficient irrigation systems such a drip system and moisture sensors, utilization of nonpotable water for irrigation, drought tolerant plants, and the use of Water Sense-labeled ultra-low flow water fixtures and toilets.</p> <p>The County of Hawai'i DWS will continue to be consulted as the Project design progresses. Concept drawings will be included in Appendix H of the DEIS and also provided to DWS and HFD for review and comment. Construction documents, including construction plans and calculations of fixture units, will be submitted to DWS and HFD for review and approval after Final EIS and Special Management Area (SMA) approval.</p> <p>Thank you for your participation in the environmental review process.</p>
County Police Department	The above-referenced Courtesy Notification for a Planned Publication of an Environmental Impact Statement Preparation Notice (EISPN) for the	Thank you for your letter dated April 6, 2022, concerning the

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>Kamehameha Schools (KS) Keauhou Bay Management Plan Keauhou, Hawai'i has been reviewed and we offer no comments at this time.</p> <p>Should you have questions, please contact Captain Gilbert Gaspar Jr., Commander of the Kona District, at (808) 326-4646, extension 299, or via email at <a href="mailto:gilbert.gaspar@hawaiicounty.gov">gilbert.gaspar@hawaiicounty.gov</a>.</p>	<p>Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge that the County Police Department has no comments at this time.</p> <p>Thank you for your participation in the environmental review process.</p>
Organizations		
<p>Daughters of Hawai'i</p>	<p>Thank you for the opportunity to submit comments regarding the Environmental Impact Statement Preparation Notice for the Proposed Keauhou Bay Management Plan Project by Kamehameha Schools.</p> <p>For over a hundred years the Daughters of Hawai'i, a nonprofit 501(c)(3) organization, has upheld our mission of historic preservation, preserving and protecting places of historical and cultural significance in Hawai'i and increasing awareness of the importance of historical preservation. Since 1903, we have drawn attention to and saved from oblivion historical sites and wahi pana such as the Nu'uuanu Pali on O'ahu to commemorate the Battle of Nu'uuanu, Kūkaniloko on O'ahu one of the two birthing places throughout the islands reserved for the highest-ranking ali'i, and Ka'iulani's Banyan marking the home of Princess Ka'iulani—Hawai'i's last heir to the throne. Today, we are the caretakers of three historic sites, listed on the State and National Registers of Historic Places. Two of the sites are managed and operated as historic house museums, Hulihe'e Palace in Kailua-Kona on Hawai'i Island and Hānaiakamalama—the Queen Emma Summer Palace in Nu'uuanu, O'ahu. Our third site, Kauikeaouli Stone, the birth site of Kauikeaouli, King Kamehameha III lies within the boundaries of the proposed project area identified by the Keauhou Bay Management Plan.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We thank you for your continued commitment in the protection and preservation of Kauikeaouli's birth site. We agree that this site is a special wahi pana that should be cared for in a way that honors the history and legacy of the ali'i who once resided at Keauhou Bay. KS is committed to the continued collaboration with Daughters of Hawai'i and will continue to consult with your leadership throughout this planning process.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>We are very interested in the Kamehameha Schools proposed development in this area at Keauhou Bay. The Daughters of Hawai'i has been an active and involved community member of the bay since 1911. In 1914, the Daughters with support from Queen Lili'uokalani, held a ceremony to mark the 100<sup>th</sup> anniversary of Kauikeaouli's birth and erect a bronze tablet to officially mark and preserve this historic site, a very important cultural and historical asset. This project proposes a significant change to the bay area and to the landscape and the surrounding areas of the birth site, which we have cared for and stewarded for over one hundred years, and will continue to care for today and in the future. We are taking our time to review the proposed development plan, to understand the process by which we can continue to engage in it, and to better understand how it will impact and affect the birth site and the surrounding areas.</p> <p>The Daughters of Hawai'i has a long history and a standing partnership with Kamehameha Schools. We applaud their extensive work throughout the islands and beyond to uphold the legacy of Princess Bernice Pauahi and our ali'i. Thank you for providing this opportunity to comment, we look forward to continue engaging with Kamehameha Schools to continue the preservation and commemoration of Kauikeaouli's birth site and his legacy.</p>	<p>Thank you for your participation in the environmental review process.</p>
<p>Keauhou Resort Condo AOA</p>	<p>We are writing you to share our views as neighbors at Keauhou Bay in regards to the new version of the KBMP.</p> <p>While we understand that you are working with the county of Hawaii, under the requirements to having two Tsunami Evacuation Roads out of Keauhou Bay in your plan, we would greatly appreciate your consideration on how these plans are going to irreversibly and negatively change the quality of our lives and homes, with large increases in traffic, overcrowding, and penetrating noise in such close proximity.</p> <p>We had hoped for a more open and transparent line of communication from Kamehameha Schools in the planning process, and feel as though our objections are being overlooked. Your response and cooperation in our concerns would be greatly appreciated.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We understand that parking and circulation has been challenging in residential neighborhoods surrounding Keauhou Bay. Street capacity and traffic circulation was taken into consideration during the development of alternatives. The</p>

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Comments	Commenter	Responses
		<p>Project involves multiple design elements to improve overall circulation and alleviate congestion. The Project proposes to improve the Old Kona Road to support multi-model transportation options while also providing a linkage across the two sides of the Bay. The roadway is intended to be pedestrian orientated to serve as a key walking route for residents and resort guests to access the dining, commercial, and recreational activities throughout the area.</p> <p>The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr &amp; Peers to identify and assess existing and future mobility option as well as potential traffic impacts generated by the Project (<i>Appendix E</i>).The MAR found that the implementation of the Project would not result in significant traffic impacts.</p> <p>An Acoustic Study was conducted for the DEIS by Y. Ebisu and Associates (<i>Appendix F</i>). Overall, the results of the Noise Assessment indicate that no significant increases in noise levels are</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>predicted to occur as a result of traffic following the full buildout of the Project. Short-term noise impacts associated with Project construction activities may occur during the earthwork and excavation phases, when site preparation work and/or roadway construction occur. In addition to the anticipated application of State Department of Health noise permit requirements and procedures during noisy construction activities, the use of quieted portable engine generators and diesel equipment will be specified for use within 500 ft of noise sensitive properties. Heavy truck and equipment staging areas will also be located at areas which are at least 500 ft from noise sensitive properties. For further discussion, please refer to section 4.13 of the DEIS.</p> <p>KS is committed to continuing to engage with the Keauhou Resort Condo AOA and area residents throughout the planning process. You will be notified of the next public meeting for the Project as well as the opportunity to review and provide comments for the DEIS. Thank you for your participation in the environmental review process.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
<p>Royal Order of Kamehameha</p>	<p>The Royal Order of Kamehameha I - Kona Chapter has reviewed the 84 page EISPN document. We have a few comments and concerns to share regarding the project of revitalizing Keauhou Bay and the Project Parcel area.</p> <p>We understand the need to develop the area, to be able to share the rich history of this location. Also the improvements recommended are important due to the frequent visits of community members and tourists in the area. In reviewing the EISPN and its alternative plans, the document frequently mentions the need for creating and maintaining the cultural significance of the area. Also providing a space for those to engage in place-based learning. We find the pursuit of maintaining our wahi pana and connection with our community, a worthy cause for development.</p> <p>With the focus on culture and education mentioned throughout the EISPN, we are looking for assurances that as the project progresses, the project as a whole and business ventures/expansions planned, do not become the center focus with our cultural sites becoming mere museum displays or tourist attractions. Education and place-based learning should be the focus, not a part of a shopping center. We already have that, Keauhou Shopping Center. To clarify, we have no issues with Keauhou Shopping Center, but the outcome of the Project Parcel area should not be a shopping center.</p> <p>Developing this parcel of land will no doubt receive comments by our community and organizations. Section 3.3 Archaeological and Cultural Resources, Page 34, states “despite the many changes to Keauhou Bay since 1946, the area remains significant as part of a larger indigenous cultural landscape. There are opportunities within the Project Area to reconnect the few remaining indigenous features or to restore those that have been covered or filled and ultimately enhance the integrity of the indigenous cultural landscape.” This is most important to us, the revitalization and reconnection to the land and historic sites. If the project stays true to this, it will be for the good of the community and our wahi pana. We ask that the Royal Order of Kamehameha I -Moku O Kona continue to be consulted as this project moves forward.</p> <p>The Royal Order of Kamehameha I was founded on April 11, 1865 by decree of Kamehameha V Lot Kapuaiwa in honor of his grandfather Kamehameha I.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>The mission of KS is to create educational opportunities in perpetuity to improve the capability and well-being of people of Hawaiian ancestry. KS' Vision 2040 Vision seeks to improve the well-being of 'āina and the lāhui within one generation. In that light, the lands bestowed upon Ke Ali'i Pauahi, and subsequently endowed to KS, enhance a sense of Native Hawaiian identity by maintaining its ancestrally mandated obligations and responsibility to past, present, and future.</p> <p>Moreover, KS, as the haku 'āina, has an obligation to care for these legacy lands in a manner conducive to not just fostering this relationship between kānaka and 'āina but to also ensure their long-range economic vitality as to positively meet the needs of the communities the institution invariably serves. To fulfill its mission, KS seeks to utilize its landholdings and resources to</p>

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Comments	Commenter	Responses
	<p>We continue to honor and celebrate his legacy as chiefs of the Royal Order of Kamehameha I. The Royal Order of Kamehameha I is devoted to the continued preservation and perpetuation of the ancient culture, customs, and traditions of Hawai'i. As well as continuing to uplift the Hawaiian people through supporting projects that align with our values.</p>	<p>achieve a balanced state between educational, cultural, environmental, economic and community returns. KS recognizes that a thriving lāhui is not solely achievable through financial gains but is equally dependent upon the well-being of its learners, the greater community, and the 'āina as a whole.</p> <p>KS is committed to continuing to engage with The Royal Order Of Kamehameha I throughout the planning process. You will be notified of the next public meeting for the Project as well as the opportunity to review and provide comments for the DEIS. Thank you for your participation in the environmental review process.</p>
<p>Businesses</p>		
<p>Fair Wind Cruises</p>	<p>We have enjoyed living and working in Keauhou Bay Small Boat Harbor over the past 50 years. During the 1970's Guido Giacometti was the President of KIC and managed Keauhou with real aloha. He respected and loved the area and the people in it. He jogged through the area daily and his mother lived in a home on the bay. Once he left the position, others who took that position did not have the same aloha and were seldom if ever seen in Keauhou Bay. Soon the nursery guys who took such good care of the landscaping were no longer holding those jobs and the area started to look in shambles. The Kona Lagoon Hotel stood empty for 13 years before it was taken down. The</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan prepared pursuant to Hawai'i Revised Statutes Chapter 343. We offer the following responses.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>Keauhou Gardens, a planted garden with acres of plants marked by their names and uses in Hawaiian medicine and culinary went to weeds. Kamehameha Schools have left this development with little to no care for decades. Their leadership is in Honolulu and the representatives here in Kona have not had Malama 'Aina on their minds.</p> <p>As heartbreaking as this all is to those who truly love Keauhou, it is past time to give some aloha to "Keauhou The Crowned Lands". It is past time that Kamehameha Schools Malama 'aina, invested energy to maintain the grounds and make the area beautiful again. Statewide everyone else seems to be working on taking care of the land, and ocean. KS wants to build a hotel? They want a hotel now, again, why did the Keauhou Beach Hotel need to be torn down and 300 jobs taken away? Who will be given the management contract for this boutique hotel? Where do they think they are going to get employees? There are not enough employees for the jobs needing to be filled now. What we need is housing. Without housing, Hawaii Island Planning Dept should not allow or approve building permits for a hotel anywhere in Kona. We have a housing crisis and it is apparent with this development plan, KS is not thinking of the community's needs. The Executive Board needs to come here and see what their "Crowned Lands" look like and take care of this forgotten development today. The shopping center is partially empty filled mostly with medical offices, not what anyone thinks of as a shopping center.</p> <p>This plan speaks of opening the bay to more residents, but when has a hotel ever opened its oceanfront area to the public more than Keauhou is now? ..... never! There are a lot of residents using this bay, beach, and harbor. But no one from KS is ever here to know this.</p> <p>The Maui Arts and Cultural Center is something I believe could be replicated here in Keauhou in place of the "boutique hotel". A smaller version of the MACC could work and bring a rich addition to our Kona community. A place open to the public sharing family fun, arts, film, and dance. MACC is funded by grants and fees generated from some of the events they host. Maui citizens participate and enjoy the learning and culturally rich opportunities</p>	<p>We agree that greater investments are needed to maintain the grounds and make the Keauhou Bay area beautiful again. KS plans to reinvigorate and transform its lands fronting the Keauhou Bay area to become a place where culture and education is celebrated and highlighted amidst viable commercial operations, which will be repositioned but are essential to fund the cultural and educational programming within the immediate area. As described in Section 3.2.1 in the Draft Environmental Impact Statement (DEIS), the Project will establish a heritage management corridor along the bayfront. The Project will enhance the cultural landscape and history associated with the heritage corridor through enhanced physical and visual access, restoration, and interpretation. The improvements include restorative actions to ensure historic integrity and longevity of the natural and cultural resources. Improved landscaping throughout the heritage corridor will be compatible with the historic character of the bay or suitable to coastal regimes typical of the Kona area. Landscaping may also include the use of native plants that could</p>

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Comments	Commenter	Responses
	<p>offered them at MACC as would Kona citizens if Kamehameha Schools could have the vision to add something missing in Kona!</p> <p>I agree with the Marine Activity Business building built nearby with parking and restrooms for the marine activity customers. We along with a few other marine businesses in Keauhou had been leasing a parking lot for our customers to park in but since covid Kamehameha Schools has not made that available for lease again, and all of these customers, 250 or so are parking along the street every day. We need public parking for the commercial users and residents that come down to the harbor.</p> <p>The state pier and parking area on the pier are necessary for mechanical equipment to have access and deliver supplies and fuel to the vessels that are permitted to moor in the harbor. We have USACE permitted moorings in this harbor. The KS plans to relocate commercial operators away from culturally sensitive areas need to accommodate the DLNR/DOBOR permittees for access to their vessels. The harbor area is a state harbor with USCG navigational lights. This is not up to KS to redesign.</p>	<p>be utilized for select cultural demonstrations and practices related to hōlua sledding, fishing, healing practices, or hula. As part of the management of this heritage corridor, KS will strive to foster collaborations with lineal descendants, cultural practitioners, and community volunteers to cultivate opportunities for KS students and the public to engage in ‘āina based restorative efforts. Implementation of the plan will in no way limit access to the shoreline. In fact, the plan will increase the amount of open public space and improve overall access to the shoreline.</p> <p>In regards to the management of the boutique resort, KS is presently looking for a resort operator that is committed to community and place and the vision that KS and its stakeholders has established for Keauhou. KS is dedicated to implementing a new model of destination management focused on Native Hawaiian regenerative tourism and traditional models of ho’okipa. Please refer to DEIS Section 3.2.2 for information on the boutique resort.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>DEIS Section 4.14 assess economic impacts of the Project. An Economic Impact Report (EIR) was prepared by Environment &amp; Economics for the Project and included in <i>Appendix G</i>. The EIR estimates that there would be an estimated total of 159 jobs generated or sustained from Project operations annually. These jobs would primarily be in service industries such as the hotel industry (e.g., building maintenance and clerks), retail industry (e.g., retail sales), and restaurant industry (e.g., food and beverage service and cooks). Employment opportunities within the Project Area will continue to diversify and increase employment opportunities in the Kailua-Kona Region.</p> <p>The provision of housing on the KS owned lands at Keauhou Bay was considered as an alternative and discussed in DEIS Section 6.3. Based on the analysis of alternatives, the Housing Alternative would fail to meet the objectives of the Project. Under this scenario, the KS lands would improve income generation opportunities to support area programming, however, a residential development may result in adverse impacts to the</p>

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Comments	Commenter	Responses
		<p>surrounding environment, particularly with regards to view planes, infrastructure, traffic, recreational activities, and open space. Additionally, the provision of housing would not be cost effective for KS to develop at this location and could be cost prohibitive for local buyers.</p> <p>We thank you for the recommendation to consider the Maui Arts and Cultural Center as a model for Keauhou Bay. DEIS Section 3.2.4 discusses the plans proposal to develop a new cultural education heritage center. The rehabilitated heritage center will be utilized to support a range of activities including: 1) KS place-based educational programming, 2) key commemoration events such as the annual Kamehameha III celebration; and 3) specific culturally-related collaborations with key community partners to host events that honor the legacy of Keauhou Bay. The heritage center will be utilized to honor and enrich the history and living legacy of excellence in this wahi pana, and to provide a place of learning and connection for locals, lineal descendants, and visitors alike.</p>

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Comments	Commenter	Responses
		<p>We acknowledge your concern that additional parking is needed for commercial users and residents. One objective of the Project is to improve existing parking areas to enhance their capacity, safety, and security. DEIS Section 3.2.5 discusses the Project’s proposed parking improvements. After full build out of the Project, the supply of parking for both the general public and for boat trailers is expected to increase (88 new parking stalls and 23 new boat trailer parking stalls).</p> <p>The Project does not propose to make any changes to existing State-owned harbor facilities nor limit access to DLNR/DOBOR permittees. Thank you for your participation in the environmental review process.</p>
<p>Outrigger</p>	<p>Aloha. I would like to voice our support of the Keauhou Bay Management Plan as we feel it will enhance the area and provide additional learning experiences for our guests from all over the World.</p>	<p>Thank you for your letter dated April 21, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan prepared pursuant to Hawai’i Revised Statutes Chapter 343.</p> <p>We appreciate your support of the Project. Thank you for your participation in the environmental review process.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
Individuals		
Akiko Nakamura	We against Keahou bay planing	<p>Thank you for your letter dated April 24, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statues Chapter 343.</p> <p>We acknowledge your comment related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific commitments to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a</p>

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Comments	Commenter	Responses
		<p>strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the ‘āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
Alapa'i Kaulia	<p>I am a decendant of the aina in Keauhou. I am against the development of this area as KAMEHAMEHA schools already has the following in their Kahaluu educational location. The following is already established. I believe that this is a foot step for more progress which is not necessary in Hawaii. There needs to be alternatives to eroding and desecrating out lands for more tourism in the name of educating our kanaka.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statues Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. The former Keauhou Beach Hotel (Kahaluu Ma Kai) is a different site. There are educational opportunities we want to take advantage of that were not conducive with the previous hotel structure.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>The income generated from activities at Keauhou Bay will be used to support KS' mission as well as the educational and cultural pieces of the Keauhou Bay Management Plan.</p> <p>As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific commitments to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career</p>

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Comments	Commenter	Responses
		<p>pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Alice Ray</p>	<p>Aloha,                      I appreciate the major effort that has already gone into planning this next step in the life of Keauhou Bay. The Kamehameha Schools Trust has clearly tried to solicit input from many directions in order to come to the proposed plan. Nonetheless, I believe it is clearly flawed in the most fundamental way and will have a negative impact on the very people in whose interest it purports to be acting, low income Native Hawaiian people.                      It purports to be aligned with the KSBE Trust's mission "to improve the capability and well-being of people of Hawaiian ancestry." Kuhanauna, KSBE's important document of organizational intent through 2040 clearly states "We will steward our 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways (for Native Hawaiians)." Yet the plan for a 150 unit high end hotel and restaurant betrays this commitment. People of Native Hawaiian ancestry have a poverty rate almost 50% higher than the state as a whole. They have the highest employment rates, yet the lowest family income rates of any group. One big reason is dead end jobs in the hospitality industry, which loves to have Hawaiian people on display, but not to pay them a living wage. Investing in another high end restaurant and fancy hotel does not create many career pathways to the kinds of jobs that produce a resilient economy. It locks more people in poverty. And these are not the kind of places low income people, Hawaiian or not, can afford to frequent. Without a doubt the tremendous financial assets the Trust has been bequeathed need to be invested wisely to ensure fulfilling its long term</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific commitments to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community</p>

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Comments	Commenter	Responses
	<p>mission. But the current proposal makes a huge investment in two very risky businesses with little chance of a proportionately high reward, either cultural or financial. 60% of new restaurants fail within a year, 80% within five years. Location is a key factor; several have failed already at the Keauhou Bay site. If the Trust is willing to take on such a high level of risk, why not instead create an equity fund in the fast growing space of social enterprises?</p> <p>Entrepreneurial businesses led by Hawaiians and/or creating professional level careers for Hawaiians, with a double bottom line, explicitly creating social as well as financial value for the community, would seem to be a much better bet - and could be done without disrupting the aina at Keauhou Bay.</p> <p>As for the proposed road: Why not start with the much less expensive option of a semi-paved walking path between the two sides of the Bay, and then measure its utility before committing to the much greater expense, and predictably more unintended negative impacts of a county road.</p> <p>Please deny this permit. While it has been submitted by an organization with a formal commitment to protect the interests of Native Hawaiians, the actual impact on native people is more likely to perpetuate systemic economic injury and injustice to them.</p>	<p>members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>DEIS Section 4.14 assess economic impacts of the Project. An Economic Impact Report (EIR) was prepared by Environment &amp; Economics for the Project and included in <i>Appendix G</i>. The EIR estimates that there would be an estimated total of 159 jobs generated or sustained from Project operations annually. These jobs would primarily be in service industries such as the hotel industry (e.g., building maintenance and clerks), retail industry (e.g., retail sales), and restaurant industry (e.g.,</p>

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Comments	Commenter	Responses
		<p>food and beverage service and cooks). Employment opportunities within the Project Area will continue to diversify and increase employment opportunities in the Kailua-Kona Region.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Alysia Fischer</p>	<p>As an archaeologist who worked on site in Keauhou Bay for multiple impact assessment and tsunami mitigation projects, I am vehemently opposed to any development that would add more commercial or residential impact to the area. Along with the uncontrolled sea level rising, any further development would negatively impact the invaluable historical and cultural resources of the area. Kamehameha Schools, the county, and the state can do better with “fundraising” for education and the preservation of this area instead of hiding it within the guise of obtaining the funds through further “for profit” development. Preservation and improvement projects are always welcome and encouraged, but it shouldn’t come at the high cost of changing the physical and cultural landscape to this extent.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai‘i Revised Statutes Chapter 343.</p> <p>We acknowledge your concerns related to commercial or residential development at Keauhou Bay. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. Guided by KS’ mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the ‘āina to support resilient economies, cultural landscapes, diverse learning, and career</p>

**Table 7.2 DEA Summary of Comments and Responses**

<b>Comments</b>	<b>Commenter</b>	<b>Responses</b>
		<p>pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process. The income generated from commercial activities at Keauhou Bay will be used to support KS' mission as well as the educational and cultural components of the Keauhou Bay Management Plan.</p> <p>DEIS Section 4.1 discusses cultural, archaeological, and historic resources within the Project Area. Several recorded archaeological sites within the Project Area are in areas with overgrown vegetation and not easily accessible. The KBMP proposes to establish a new cultural heritage corridor with the aim to preserve and protect the most culturally significant and vulnerable sites while enhancing opportunities for the public to engage and learn about their importance. Implementation of the Project is anticipated to generate long-term benefits by preserving sensitive archaeological sites and</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>implementing a plan to steward the sites in perpetuity.</p> <p>Thank you for your participation in the environmental review process.</p>
Amanda Nixon	This is a horrible selfish idea. Our bay is small and cannot handle another resort. A'ole to more development. The beach is way too small. No no no.	<p>Thank you for your letter dated April 11, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your concerns related to the proposed boutique resort development. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific commitments to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision,</p>

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Comments	Commenter	Responses
		<p>the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the ‘āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Amy Axelrod</p>	<p>As a local resident in the Keauhou Bay area, I implore you to NOT install new commercial retail or condos. This is one of the few untouched places on our precious Kona aina. Please show this historic area the respect it deserves by keeping its untouched green spaces green and its roads quiet. Turning the Old Kona Rd into a thoroughfare is no way to preserve the bay.</p> <p>Please take seriously this request to leave our beautiful bay in peace.</p>	<p>Thank you for your letter dated April 14, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan prepared pursuant to Hawai‘i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand</p>

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		<p>and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
Ann Nichols	My husband and I own at Kanaloa at Kona. This project is oversized and a terrible idea for one of the last public ocean access. Not only is it defiling a	Thank you for your letter dated April 21, 2022, concerning the Environmental Impact Statement

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Comments	Commenter	Responses
	<p>historic area, it will create traffic issues, congestion and ruin the community character of Keauhou Bay and Heiea Bay.</p>	<p>Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to</p>

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Comments	Commenter	Responses
		<p>achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr &amp; Peers to identify and assess existing and future mobility option as well as potential traffic impacts generated by the Project (<i>Appendix E</i>).The MAR found that the implementation of the Project would not result in significant traffic impacts.</p> <p>Thank you for your participation in the environmental review process.</p>
Arden Wilken	<p>I am an owner of a unit in Keauhou Resort at 78-7039 Kamehameha III RD just north of the proposed development at Keauhou Bay.</p> <p>We also own a small boat that we keep for our own recreational purposes at the current boat storage yard just south of Keauhou Resort and north of Keauhou Bay.</p> <p>1. You should do something to encourage both roads into the new development to be used so that traffic is not just centered on Kamehameha III.</p> <p>As well, do whatever traffic modifications are necessary to keep traffic slow on Kamehameha III below Alii Drive.</p>	<p>Thank you for your letter dated April 13, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. We offer the following responses.</p> <p>The KBMP involves reestablishing the Old Kona Road as the primary</p>

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Comments	Commenter	Responses
	<p>2. Maintain the current boat storage yard (with the advertised improvements) as well as increase the number of boat trailer parking spaces in the launch area.</p>	<p>vehicle thoroughfare through the bay to direct traffic away from the Kamehameha III birth site. The new thoroughfare will allow vehicular and pedestrian access to the Keauhou bayfront from both Kaleiopapa Street and Kamehameha III Road. The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr &amp; Peers to identify and assess existing and future mobility option as well as potential traffic impacts generated by the Project (<i>Appendix E</i>).The MAR found that the implementation of the Project would not result in significant traffic impacts.</p> <p>We acknowledge your concern that additional parking is needed for commercial users and residents. One objective of the Project is to improve existing parking areas to enhance their capacity, safety, and security. DEIS Section 3.2.5 discusses the Project’s proposed parking improvements. After full build out of the Project, the supply of parking for both the general public and for boat trailers is expected to increase (88 new</p>

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Comments	Commenter	Responses
		parking stalls and 23 new boat trailer parking stalls).
Arden Wilken	<p>I am opposed to the current proposed KS plan for Keauhou Bay. I feel it would forever change in a negative way the landscape of the bay due to overcrowding, overdevelopment and more pollution- including sound and traffic.</p> <p>There are already many commercial spaces in Keauhou Shopping Center that are empty, there is already a hotel, The Outrigger, in the bay, and more development would upset the fragile environment of the water itself and produce more heat from current foliage being sacrificed.</p> <p>Thank you for your understanding and help.</p>	<p>Thank you for your letter dated April 21, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed</p>

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Comments	Commenter	Responses
		<p>to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
Athena Gray	<p>It's my understanding there are plans to construct a resort at Keauhou Bay. Please do not try to build a hotel in this tiny little bay. This is an important area to keep sacred due to King Kamehameha being born there. This is also an area our community should be able to access and enjoy without having to be near a hotel or a bunch of tourists. This is just so wrong, please find another place for your hotel.</p>	<p>Thank you for your letter dated April 12, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the</p>

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		<p>bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
Barbara Nobriga	<p>I have met with several of you on serval different occasions and have always Let you know my dissatisfaction with the development of Keauhou Bay. It is a disaster and disrespectful of our Alii and Hawaiian people.</p> <p>I grew up down there, our family had a beach house right on the site of the Fair Wind. I would sit on the sea wall at night and hook aweoweo and uu. I played in the baptisimal rock and let the waves wash over me and push me</p>	<p>Thank you for your letter dated April 25, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP)</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>Into Kupalalua which is non existent today, along with our house that went out with the tidal wave.</p> <p>We shipped cattle out of the beach where the pier is. My mother used to rope and drag the pipi to the long boat with the rest of our family. We played and swam at the black sand beach where the pier is. I learned to swim in Keauhou and would take my horse in swimming.</p> <p>We could not drive from the north side to the south at high tide because there was at least a foot of water covering the road.</p> <p>The manta were always in the bay as we swam from sampan to sampan.</p> <p>Then Mr. Troy Post arrived right out of Texas. He immediately bulldozed the oldest Heiau to make a golf course. The remains are still there in the form of bougainvillea. Then came the massive “kitty litter” box also known as the volleyball court. Construction was also underway for the pier. That was the beginning of the end of beautiful Keauhou. Now Kilinehehe beach was obliterated The memory of Mary Hauanio crawling on the rocks catching opihi and aama is still etched in my mind. We watched Doc Hill build his home Now it was our turn and we built further out on the point in the 60s. We watched the Kona Surf go up as we were directly across the bay. We sold when the Bay got so crowded and run down.</p> <p>Now you folks want to restore the Historic Bay. What are you going to restore? Putting a Boutique where the canoe halau is is ridiculous . Tourist look for culture and history. A sand beach with canoes ready to go is in tune with old Hawaii, not a fancy boutique. Push the kitty litter box mauka, let the beach come back The Fair winds has totally destroyed that side of the Bay In 1973 the Daughters of Hawaii were given outright, the Kamehameha III birth place complete with open space, maintenance and the stipulation that not so much as a rock could be moved without first consulting us. That was good for a few years till a change of management went. From there it wasn't a rock being moved, it was truckloads and no contact with the Daughters. It was in the late 90s I Noticed the driveway into the Fair Winds and asked the the. CEO what happened. His response, “I guess we weren't paying attention. Which has been happening right along.</p>	<p>prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We thank you for sharing you and your family's history in the bay. Your insight and knowledge of Keauhou and its history have been invaluable during this process.</p> <p>As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes,</p>

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	<p>If you want to do all this development, go behind the boat trailers parking, Plenty room tourist can walk from the hotel tour around your fancy boutique. The place is a fire waiting to happen.</p> <p>I could go on and on, I hope I conveyed the message and manao.</p>	<p>diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Barry Willis</p>	<p>Keauhou Bay must not be changed from its purely Hawaiian purposes which it serves now. Those include swimming, canoe paddling, volleyball, local activities.</p> <p>Please do not allow development of this precious part of Hawaii's heritage.</p>	<p>Thank you for your letter dated April 21, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with</p>

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		<p>lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Implementation of the KBMP is not expected to impede the practice of any of the practices you have mentioned. Moreover, the KBMP is designed to improve access to the bayfront and enhance opportunities for cultural practices.</p> <p>Thank you for your participation in the environmental review process.</p>
Ben Rice	Thank you for the opportunity to comment on the Keauhou Bay Management Plan Environmental Impact Statement Preparation Notice (EISPN).	Thank you for your letter dated April 20, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou

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	<p>As has been shown time and again the water quality of this beautiful Bay is unacceptable ... from marginal to terrible. The water which runs off the golf course above the K.S. planned site already negatively impacts the Bay. It is alarming to think about what all the polluted water running off acres of concrete from the site will do. This spot on the Big Island is culturally significant and popular <i>because</i> of the Bay. What remediation will make the Bay safe for swimming, paddleboarding and other water sports? (The pollution impacts the adjacent surf spot at Heeia Bay as well).</p> <p>The K.S. stated desire to use the space to better honor the birth of King Kamehameha III and provide a place for Hawaiian heritage to be celebrated and honored is a clever hypocrisy. The people who will take over this beautiful Bay will be the well to do who inhabit the 150 units and enjoy the “fine dining” restaurant. Few will be native Hawaiians. Another takeover of one of the last important cultural sites of this beautiful Island.</p> <p>Thank you for addressing the foregoing concerns. This is my request for additional work. Please respond to my queries as part of your public review process and to me by email.</p>	<p>Bay Management Plan (KBMP) prepared pursuant to Hawai‘i Revised Statutes Chapter 343.</p> <p>As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS’ mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the ‘āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new</p>

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		<p>development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Potential land erosion due to the implementation of the KBMP has been addressed in the Draft Environmental Impact Statement (DEIS). DEIS Section 4.5, describes stormwater runoff peak flow estimates for both existing conditions and with project implementation. At present, portions of the KS properties at Keauhou Bay are unmanaged and susceptible to runoff and erosion. The Project is expected to result in long-term benefits as permanent sediment control measures and stormwater infrastructure would minimize runoff and erosion. Those strategies may include but are not limited to detaining, retaining and infiltrating runoff into the ground.</p> <p>Thank you for your participation in the environmental review process.</p>

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Comments	Commenter	Responses
<p>Betsy Gerace</p>	<p>As an owner of a condo on Kamehameha III Rd., I am writing to express my concern with the proposed development at the Bay, to include a 150 unit resort. As this is essentially a five minute walk from my house I envision a changed environment outside my door. The development of a resort in this pristine and special place does not add to our community rather it will attract hordes of visitors and all that comes with that-traffic, noise, wear and tear on our roads, over use of our waters, to name a few. I support the cultural aspects of the plan, but do not see how a resort fits in. There is already a large hotel in the vicinity-The Outrigger. Why is there a need for more hotel space?</p> <p>I appreciate that the opportunity to share during this public comment period and hope that my objections are weighed along with all the comments.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your concerns related to the boutique resort. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process. The income generated from activities at</p>

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Comments	Commenter	Responses
		<p>Keauhou Bay – including the resort – will be used to support KS’ mission as well as the educational and cultural components of the Keauhou Bay Management Plan.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Betty De Roy</p>	<p>What is the thinking of all of you who want to develop the area at Keauhou Bay? Shame on Kamehameha Schools/Bishop Estate for wanting to go ahead to develop that area into what? 150 hotel rooms for more tourists to enjoy and taking the area away from the local people. Haven’t any of you learned from our recent challenges with COVID 19 that we should NOT put all our efforts into tourism which came to a sudden halt with the COVID 19 pandemic? The area will not be able to handle the traffic that will result when another resort is squeezed into a confining area at Keauhou Bay. Am I wasting my time by letting you know I vehemently object to the proposed development of that area. Betty De Roy, born and grew up in Hawaii.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai’i Revised Statutes Chapter 343.</p> <p>We acknowledge your concerns related to the boutique resort. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. Guided by KS’ mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the ‘āina to support resilient economies, cultural landscapes,</p>

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		<p>diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process. The income generated from activities at Keauhou Bay – including the resort – will be used to support KS’ mission as well as the educational and cultural components of the Keauhou Bay Management Plan.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Bobby Camara</p>	<p>I’ve read the plan and appreciate the opportunity to share comments.</p> <ol style="list-style-type: none"> <li>1. It always perplexes me that plans of this nature always seem to fail to capture correctly geology of the site and surroundings. There are readily available geologic maps that must be consulted. Though the Kona Districts seem safe from lava flow hazard, the flow on the north side of the subject property issued from Wahapele, very violently and explosively, 710 +/- 150 years ago. That eruption disrupted life of Native Hawaiians in the region.</li> <li>2. Local families have been priced out of “Staycations”. Our economy, based on tourism, has seen astronomical increases in hotel room rates.</li> </ol> <p>If KS is, as is stated, dedicated to ensuring perpetuation of Native Hawaiian culture and important cultural sites as are found on the shores of Keauhou Bay, then it seems logical and entirely reasonable that KS build overnight amenities and host local families at very affordable prices. Yes, we understand that many believe that this re-development should pay for itself and be self-sustaining. But. It’s imperative for the health and well-being of</p>	<p>Thank you for your letter dated March 30, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai’i Revised Statutes Chapter 343. We offer the following responses.</p> <p>This Project aims to purposefully pursue the ‘Āina Aloha Economic Futures Declaration with a specific focus to “assert collective kuleana to restore degraded environments, sustainably managed human-occupied spaces, and protect the</p>

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	<p>our local populace, many of whom work in the tourist industry, that our people be able to rejuvenate near the shore. They can participate in cultural programming at the Cultural Center, learn about the rich histories of the ‘āina, kai, and people of Keauhou, and share that knowledge with friends and family. KS should be able to subsidize that Family Learning.</p> <p>Rather than building 1800 square-foot luxury bungalows and attracting more wealthy malihini who have no connection to, or aloha for, place, build small 1-bedroom hale, basic and simple, patterned after beach houses of the mid-1900s. Single-walled, post-and-pier, shutter windows, covered lānai, with pūne‘e for sleeping. And make them affordable. Campsites with central shower and restrooms should also be included.</p> <p>3. All landscaping must consist of endemic, native, or Polynesian-introduced species. Plant lots of ‘ōhi‘a, ‘a‘ali‘i, lama, wiliwili, pili, and niu. Plan plantings of niu so that trees are allowed to fruit and nuts can fall in fenced off areas to minimize injury-by-falling-coconut lawsuits. Consider exemptions for favored period plants such as tiare, laua‘e, spiderlilies, crownflower, nightblooming cereus.</p> <p>Consider construction using readily available lava and coral (lime) mortar. Thick stone walls allow interiors to stay cool. No need for air-conditioning.</p> <p>Mahalo for your consideration.</p>	<p>vibrancy of intact ecosystems.”</p> <p>However, KS further acknowledges that one aspect of Project will require an innovative approach to redefine the role of ho‘okipa (to welcome others with hospitality) in the region. Chapter 3 of the Draft Environmental Impact Statement (DEIS) describes various components of the resort inclusive of the design of the guest units in detail.</p> <p>We thank you for providing information on the geologic history of Keauhou. A description of the geology in the vicinity of the Project Area is provided in Section 4.3 of the Draft Environmental Impact Statement (DEIS).</p> <p>As described in Section 3.2.1 in the Draft Environmental Impact Statement (DEIS), the Project will establish a heritage management corridor along the bayfront. The Project will enhance the cultural landscape and history associated with the heritage corridor through enhanced physical and visual access, restoration, and interpretation. The improvements include restorative actions to</p>

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		<p>ensure historic integrity and longevity of the natural and cultural resources. Improved landscaping throughout the heritage corridor will be compatible with the historic character of the bay or suitable to coastal regimes typical of the Kona area. Landscaping may also include the use of native plants that could be utilized for select cultural demonstrations and practices related to hōlua sledding, fishing, healing practices, or hula. As part of the management of this heritage corridor, KS will strive to foster collaborations with lineal descendants, cultural practitioners, and community volunteers to cultivate opportunities for KS students and the public to engage in ‘āina based restorative efforts.</p> <p>Thank you for your participation in the environmental review process.</p>
Bobby Camara	Gotta preserve/restore site of K1’s hale, as well as K3’s birthplace.	<p>Thank you for your letter dated April 6, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai‘i Revised Statutes Chapter 343.</p>

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		<p>DEIS Section 4.1 discusses cultural, archaeological, and historic resources within the Project Area. The KBMP proposes to establish a new cultural heritage corridor with the aim to preserve and protect the most culturally significant and vulnerable sites while enhancing opportunities for the public to engage and learn about their importance. Implementation of the Project is anticipated to generate long-term benefits by preserving sensitive archaeological sites and implementing a plan to steward the sites in perpetuity.</p> <p>Thank you for your participation in the environmental review process.</p>
Bobby Camara	<p>I noted that the Aha Moku for this island will be consulted. Note that their map, attached, may be construed as depicting ahupuaa, but they are not. Apparently they depict “watershed boundaries” or something. The “good” accurate ahupua‘a maps are also attached.</p>	<p>Thank you for your letter dated April 8, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai‘i Revised Statutes Chapter 343.</p> <p>Mahalo for sharing the ahupua‘a map. The DEIS includes maps of the Project Area in relation to ahupua‘a boundaries on figures 1-2 and 4-1. The ahupua‘a boundary layer was sourced from the Office of Hawaiian Affairs (October 2019).</p>

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Comments	Commenter	Responses
		Thank you for your participation in the environmental review process.
Booey Hodgins Garcia	<p>What Kam Schools/Development is planning for Keauhou Bay is nothing short of rape. For Hawaiians who care about their aina and history, I am shocked and disgusted. I grew up on that bay. Back then the coral, wana/vana sp?, little shrimp on the buoys, opihi and a'ama on the rocks, and crystal clear water.</p> <p>Even now with what is currently on the bay, is a total disgrace and lacks any foresight whatsoever. Just like the mauka side of Ali'i Drive. I remember about 16 homes on the ocean in the 50s. (Could have been more. I was young. ). You could see the ocean and who was fishing.</p> <p>Don't let the same thing happen to Keauhou. Please.</p>	<p>Thank you for your letter dated April 8, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed</p>

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		<p>to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Bridget K Butler</p>	<p>I want to mahalo you for the invite to comment on this proposed development for beloved Keauhou Bay. I took time to pule, to noho, to ho'olohe, and here is my mana'o:</p> <p>We all deeply love Pauahi and her dying wishes for her po'e Hawai'i, this love expressed for nā keiki of Hawai'i through the forming of Kamehameha Schools &amp; Bishop Estates. It's a wonderful legacy that she left- quite a remarkable woman she is and inspires many of us to be. Pauahi had a vision to see the generations after her to ho'oulu thrive and she put her money where her heart was and left it all to her beloved nāpua. Many keiki who are kanaka maoli have been greatly enriched and been given wonderful opportunities and an education that couldn't have been afforded elsewhere to push them towards success. For that we are all grateful.</p> <p>My concern is that although these keiki have been well educated by Kamehameha Schools for a few generations now, and many have thrived because of KS, this upcoming generation faces new challenges, and as well educated as they might be with competitive paying jobs and careers, still cannot financially afford to buy land, own a home in their own ke 'one hānau-</p>	<p>Thank you for your letter dated April 21, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your concerns regarding the boutique resort. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic</p>

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	<p>especially right here in the district of Kona. It grieves me as I know it does others that with all the rich resources that Bernice Pauahi left for this dream of hers, the best we seem to know how to do with it in order to generate income, is continue to build hotels. Hotels, surrounded by retail space that is targeted for malihini with the hopes of off-setting it with creating space for cultural areas within the development. While we can all appreciate the cultural preservation and aspect of this proposal, as we all know, Hawai'i is in a housing crisis. There is a plethora of hotels, condos, vrbo's and now million dollar homes for malihini to invest into- but what is there for the desendants of Pauahi? Where do they noho? Where is their ku'una- their wahi pana for recreation? Is another hotel and commercial retail space really in their best interest? If Pauahi was sitting with us today- would she approve another hotel to go up on one of the last rural areas on Ali'i Drive between Keauhou Bay and Kamakahonu knowing todays challenges for her lāhui?</p> <p>Whether we are koko Hawai'i or koko Haole, if we call Hawai'i home than we have kuleana to mālama i ka 'āina, ke kai, a kekahi i kekahi me ke aloha nui. With all due respect, perhaps we need to re-evaluate if another multi million dollar development for tourism is really in the best interest for kanaka at this time and for Keauhou Bay itself and all life that sustains within her. Perhaps it is time to focus on development that is generated to preserving a lāhui and its 'ike nohona before another hotel?</p>	<p>planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process. The income generated from activities at Keauhou Bay – including the resort – will be used to support KS' mission as well as the educational and cultural components of the Keauhou Bay Management Plan.</p> <p>The provision of housing on the KS owned lands at Keauhou Bay was considered as an alternative and discussed in DEIS Section 6.3. Based on the analysis of alternatives, the Housing Alternative would fail to meet the objectives of the Project. Under this scenario, the KS lands would improve income generation opportunities to support area programming, however, a residential development may result in adverse impacts to the</p>

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		<p>surrounding environment, particularly with regards to view planes, infrastructure, traffic, recreational activities, and open space. Additionally, the provision of housing would not be cost effective for KS to develop at this location and could be cost prohibitive for local buyers.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Bryce Groark</p>	<p>I am a business owner and our family has lived the past 20 years in Keauhou. We beg you to not push forward with this proposal that would ruin such an important place. It deserves to be cherished, not destroyed.</p> <p>We would support you in any form of stewardship in Keauhou and increasing access to its cultural significance - but for as long as we can remember, Keauhou has been perpetually neglected by KSBE.</p> <p>KSBE just tore down the hotel at Kahalu'u - admitting it should never have been built. Why repeat that mistake? How about something to actually benefit the community and children? Something towards your mission? This is a move backwards.</p> <p>Destroying the natural habitat, laying more concrete, adding more challenges to the ocean and bringing in more tourists is not in any way what Keauhou needs. And is not anywhere in line with the KS mission.</p> <p>Please reconsider and know that we are building a very public, monolithic coalition to fight this to the end if it moves forward.</p> <p><b><i>"Kamehameha Schools' mission is to fulfill Pauahi's desire to create educational opportunities in perpetuity to improve the capability and well-being of people of Hawaiian ancestry."</i></b></p> <p>Mahalo for allowing us to comment on this.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned</p>

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		<p>activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>The former Keauhou Beach Hotel (Kahaluu Ma Kai) is a different site. There are educational opportunities we want to take advantage of that were not conducive with the previous hotel structure.</p> <p>The income generated from activities at Keauhou Bay will be used to support KS' mission as well as the educational and cultural pieces of the Keauhou Bay Management Plan.</p>

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		Thank you for your participation in the environmental review process.
Charles Keaoloha Leslie	<p>It has come to our attention at the last minute that KSBE is planning to build a "boutique" hotel and additional commercial, tourist-oriented structures and areas related to recreational use at Keauhou.</p> <p>We agree with any plans that look to create a cultural site, especially a wahi so steeped in mo'olelo, history and historical significance as the birthplace of Kauikeaouli. We would have hoped that KSBE would be a little bit more judicious in its use of land and funds after having to tear down two hotels at Kahalu'u which it admits should never have been built.</p> <p>Why are you planning to go backwards? As members of the Kai Kuleana network, Kealakekua Bay Cultural Advisory 'Ohana and cultural practitioners of lawai'a traditions based at Ka'awaloa, Nāpo'opo'o and Pu'u 'Ohau we are shocked and disappointed. We are currently engaged in a Community Action Plan process at Kealakekua Bay MLCD/State Historic Park with the state, the county, federal and community members to reverse this type of thought related to our wahi. All of our Kona Hema communities (Miloli'i, Ho'okena, Hōnaunau and Nāpo'opo'o) are working to huli how our wahi are being used. The plans to return to action based on 'ike kupuna guides us in our endeavors and we hope would lead you as well.</p> <p>The cultural knowledge held in our kaiaulu kanaka maoli which also holds environmental preservation inherently within its base, needs to take precedence over this mindset that more tourism-oriented action should be happening. Why not build some affordable housing down there for kanaka maoli? That, to us, would be more along the guidelines of Pauahi Bishop's love for her people and the future of our 'ōpio.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed</p>

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	<p>We trust KSBE will reconsider this immediately and stay in line with a more forward thinking, culturally based mindset that we are actively pursuing through our many hui such as Kai Kuleana, Kua‘aina, E Ala Pu, Maui Nui Makai just to name a few.</p> <p>Mahalo for allowing us the space to comment,</p>	<p>to achieve the goal of developing resilient communities by stewarding the ‘āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>The former Keauhou Beach Hotel (Kahaluu Ma Kai) is a different site. There are educational opportunities we want to take advantage of that were not conducive with the previous hotel structure. The income generated from activities at Keauhou Bay will be used to support KS’ mission as well as the educational and cultural components of the Keauhou Bay Management Plan.</p> <p>The provision of housing on the KS owned lands at Keauhou Bay was considered as an alternative and discussed in DEIS Section 6.3. Based on the analysis of alternatives, the Housing Alternative would fail to meet the objectives of the Project. Under this scenario, the</p>

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		<p>KS lands would improve income generation opportunities to support area programming, however, a residential development may result in adverse impacts to the surrounding environment, particularly with regards to view planes, infrastructure, traffic, recreational activities, and open space. Additionally, the provision of housing would not be cost effective for KS to develop at this location and could be cost prohibitive for local buyers.</p> <p>Thank you for your participation in the environmental review process.</p>
Cindy Freitas	<p>My name is Cindy Freitas and I'm a Native Hawaiian descended of the native inhabitants of Hawai'i prior to 1778 and born and raised in Hawai'i.</p> <p>I am also a practitioner who still practice the cultural traditional customary practices that was instill in me by my grandparents at a young age from mauka (MOUNTAIN TO SEA) to makai in many areas.</p> <p>I Opposed for the following reasons;</p> <ol style="list-style-type: none"> <li>1. This is the birthplace of Kauikeaouli.</li> <li>2. Kamehameha have admitted that the two hotel that was remove (Kona Lagoon and Keauhou outrigger Hotel) that it should have not been due to cultural sights in that area.</li> <li>3. Native Hawaiian culture and natural resources, Ala Kahakai National Historic Trail is a 175 mile corridor encompassing a network of culturally and historically significant trails. This "trail by the sea" traverses wahi pana (storied landscapes), ancient Hawaiian sites and over 200 ahupua'a (traditional land divisions)</li> </ol>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statues Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which</p>

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	<p>The Ala Kahakai National Historic Trail passes through and provides opportunities to protect significant natural areas and ecosystems with indigenous and endemic species along its route which includes,</p> <p>Anchialine pools Caves endemic species habitat endangered and threatened species ecological zones lava forms and formations</p> <p>Therefore it is unacceptable for any DEVELOPERS to build any thing on the Ala Kahakai National Historic Trail.</p>	<p>leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>DEIS Chapter 4.1 discusses cultural, archaeological, and historic resources within the Project Area. Several recorded archaeological sites within the Project Area are in areas with overgrown vegetation and not easily accessible. The</p>

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		<p>KBMP proposes to establish a new cultural heritage corridor with the aim to preserve and protect the most culturally significant and vulnerable sites while enhancing opportunities for the public to engage and learn about their importance. Implementation of the Project is anticipated to generate long-term benefits by preserving sensitive archaeological sites and implementing a plan to steward the sites in perpetuity.</p> <p>Based on recommendations during consultation with Nā Ala Hele Hawai'i Trail and Access System within the DLNR Division of Forestry and Wildlife (DOFAW) and the National Park Service Ala Kahakai National Historic Trail, two areas within the TMK: 7-8-010:044 portion of the Project Area, totaling 1.97-acres, were re-examined by Haun &amp; Associates in October, 2022, in order to locate the remains of two historic trails (Keauhou Trail: Sites 15243 and Kainaliu Trail: Site 24259). The findings of the survey are included in the 2022 Haun &amp; Associates' ARS and Site Condition Update (Appendix B) and summarized in DEIS Chapter 4.1.2.3. The historical background</p>

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		<p>of these trails in relation to the overall development of the bay over time is discussed in DEIS Chapter 4.1.1.</p> <p>The two subject trails are depicted on historic maps of the area as far back as 1885. Aerial imagery of the Keauhou Bay area taken in 1954 show that these trails alignments had remained intact until at least that time. However, the trails do not appear in any subsequent aerial images likely due to the Project Area having been mechanically disturbed and overgrown with vegetation. Using the 1954 aerial imagery, the locations of the two historic trail alignments were cleared of vegetation and systematically examined by Haun &amp; Associates archaeologists.</p> <p>An approximately 1.26-acre corridor was cleared of vegetation and surveyed along the historic Keauhou Trail alignment (Site 15243). The ground surface within this corridor showed evidence of past mechanical grubbing and no remnants of the Keauhou Trail were present.</p> <p>An approximately .71-acre corridor encompassing the alignment of the historic Kainaliu Trail (Site 24259)</p>

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		<p>was cleared of vegetation and surveyed. This corridor also showed evidence of grubbing with the presence of several linear mounds created by bulldozer blades. No remnant of the Kainaliu Trail was observed.</p> <p>The KBMP includes actions to honor the alignments of historic trails throughout the property. The planned network of new and improved walking paths throughout the Project Area will increase pedestrian access and provide an intact north-south pathway through the entire site to help recreate the experience of walking along the historic Old Government Road. The KBMP also calls for the re-establishment of the Old Kona Road as a public access vehicular easement, thereby re-opening a historic path that had become overgrown with vegetation and fallen into disuse. The mauka-makai walking experience of the historic Keauhou Trail will also be honored through the establishment of the recreation corridor. This open space corridor area will allow for bay visitors to freely walk from the coastline up to the Old Kona Road. The open space recreation corridor</p>

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		<p>also connects to the network of walking paths situated both above and below 'Ahu'ula Cliff. The history and significance of the known historic trails will be incorporated into interpretive elements along the walking path network. Please see DEIS Chapter 3.2 for a detailed description of the KBMP. DEIS Chapter 4.11 discusses anticipated impacts of the KBMP on pedestrian patterns and circulation.</p> <p>The former Keauhou Beach Hotel (Kahaluu Ma Kai) is a different site. There are educational opportunities we want to take advantage of that were not conducive with the previous hotel structure. The income generated from activities at Keauhou Bay will be used to support KS' mission as well as the educational and cultural components of the Keauhou Bay Management Plan.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Connie Olivia</p>	<p>regarding the Kamehameha Schools proposal for the Keauhou Bay area, despite the biased coverage in the Honolulu Star Advertiser, Kamehameha wants to build a commercial enterprise which would generate income to the foundation. The area doesn't "need" a boutique hotel with restaurants and spa, as much as it needs vehicular, boat and pedestrian plan for the area. The article I read meshes the two....hotel and local improvements. Historically, projects like this veer towards the commercial venture and not</p>	<p>Thank you for your letter dated March 29, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP)</p>

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	<p>the community side. I hope if and when Kamehameha Schools succeeds with its plan, the state/county holds the foundation accountable.</p>	<p>prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational</p>

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		<p>values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Cyndie Gill</p>	<p>I am writing to you to voice my opposition with plans to allow development of hotel and retail space at Keauhou Bay.</p> <p>The Bay is an area of cultural importance and it is surprising well visited by people using Canoe Club facilities, volleyball and boating excursions by existing vendors. It is such a small area with an almost non-existent beach. Introducing additional activities will surely overwhelm an already fragile area; further polluting the water, disturbing the reef and dangerously congesting the boat harbor.</p> <p>Planned traffic thoroughfares will be dangerous for Kam III Rd. neighbors and pets who use the current roadways for exercise and enjoyment of the quiet area.</p> <p>I hope local planners can appropriate assess the negative impact of increased congestion and how it will significantly disturb valuable natural and cultural resources at Keauhou Bay.</p> <p>I hope that great attention to environment and safety will be paid throughout the review process, which will ultimately result in decisions to decline additional development in this area.</p> <p>Mahalo for your mālama.</p>	<p>Thank you for your letter dated April 21, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a</p>

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		<p>strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the ‘āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>We understand that parking and circulation has been challenging in residential neighborhoods surrounding Keauhou Bay. Street capacity and traffic circulation was taken into consideration during the development of alternatives. The Project involves multiple design elements to improve overall circulation and alleviate congestion. The Project proposes to improve the Old Kona Road to support multi-model transportation options while also providing a linkage across the two sides of the Bay. The roadway is intended to be pedestrian orientated to serve as a key walking route for residents and resort guests to access the dining,</p>

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		<p>commercial, and recreational activities throughout the area.</p> <p>The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr &amp; Peers to identify and assess existing and future mobility option as well as potential traffic impacts generated by the Project (<i>Appendix E</i>).The MAR found that the implementation of the Project would not result in significant traffic impacts.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Darlene Paulson</p>	<p>Aloha just read this I do paddle with Keauhou Club when there is no more hotels enough .. Add my name if you can to the No list.</p>	<p>Thank you for your letter dated April 13, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your concerns related to the boutique resort. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. Guided by KS'</p>

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		<p>mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the ‘āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process. The income generated from activities at Keauhou Bay – including the resort – will be used to support KS’ mission as well as the educational and cultural components of the Keauhou Bay Management Plan. Thank you for your participation in the environmental review process.</p>
Dave Avery	Please do not destroy Keauhou Bay with commercialization. There currently is no monitoring down there as it is and the bay can't handle all the new construction and population.	Thank you for your letter dated April 25, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai‘i Revised Statutes Chapter 343.

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		<p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational</p>

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		<p>values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>David S. Case</p>	<p>My name is David Case, and I have been a Hawai'i resident for a little over 10 years. My wife and I can see Keauhou Bay from our lanai. I steer, and paddle outrigger canoes several times per week in and around the bay in various outrigger related racing and recreational activities. I am writing this in my personal capacity and do not represent the views of any organization.</p> <p>Kamehameha Schools ("KS") is to be lauded for its planning and expenditures to create and implement the Keauhou Bay Management Plan (KBMP), which appears to dovetail with plans to develop the area around Kahalu'u Beach Park as part of a larger cultural and educational corridor between Kahalu'u and Keauhou.</p> <p>My concern is that the EISPN contains a couple of erroneous assumptions and in other respects may lead to an EIS that does not take a "hard look" and some important issues. These are discussed below.</p> <p>A. <u>Erroneous Assumptions</u></p> <p>1. <u>"Very Low Rainfall and Runoff"</u> (EISPN 3'16). The EISPN assumes that because rainfall reaches "a maximum average of 35 inches per year" that there is "very low rainfall and runoff" into the bay. This is based on a 2016 NOAA analysis and does not account for any changes in those averages in the last eight years. This must be reconsidered in light of the rapid changes brought on by climate warming. This assumption also appears to be internally inconsistent with other statements in the EISPN. See, notably EISPN 4-4 at Paragraph 11 acknowledging that "Portions of the Project Area are also located within the AE and VE Flood Zones."</p> <p>In my experience, regardless of the historic maximum rainfall average, there are several heavy rains each year that flood across the Old Kona Road onto the adjoining downslope to the bay. The force of the water is sufficient to dig a noticeable trench</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. We offer the following responses.</p> <p>Potential land erosion due to the implementation of the KBMP has been addressed in the Draft Environmental Impact Statement (DEIS). DEIS Section 4.5, describes stormwater runoff peak flow estimates for both existing conditions and with project implementation. At present, portions of the KS properties at Keauhou Bay are unmanaged and susceptible to runoff and erosion. The Project is expected to result in long-term benefits as permanent sediment control measures and stormwater infrastructure would minimize runoff and erosion. Those strategies may include but are not limited to detaining, retaining and infiltrating runoff into the ground.</p>

**Table 7.2 DEA Summary of Comments and Responses**

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	<p>across the road and into the downslope to the bay carrying rocks and dirt from the road with it.</p> <p>The flooding also flows down Kamehameha III Hwy sufficient to overflow the curb at the end of the road, dumping silty water directly into Keauhou Bay. The bay water turns brown and is unattractive for swimming following these events. See, photo attached electronically as Exhibit A to this letter. Others are available on request.</p> <p>2. <u>No Rare, Threatened, or Endangered Species or Habitats</u> (EISPN at Paragraph 9)</p> <p>The EISPN notes that: “The Project is not expected to affect any rare, threatened, or endangered species or habitats.” I should be noted that Monk Seals have been known to haul out to rest on the old Keauhou boat ramp, south of the rock wall on the north side of the bay. See, photo attached electronically as Exhibit 8 to this letter.</p> <p>B. <u>Silt Accumulation in the Bay</u></p> <p>The federal National Oceanographic and Atmospheric Administration (“NOAA”) has listed Keauhou Bay One as a “Marine Protected Area” that is to be “permanently protected year-round” and that such “protection be in perpetuity”.<sup>1</sup> Historically, the federal Environmental Protection Agency (“EPA”) also performed a water quality analysis of various bodies of water every four years. In 2006 and 2010 the EPA found that the water in Keauhou Bay was “good”, but in 2014 it concluded that it was “good” for recreational use, it was “impaired” due to “turbidity” as it relates to “Fish, Shellfish, And Wildlife Protection and Propagation.”<sup>2</sup></p> <p>C. <u>Nitrogen Pollution.</u> An undated research study in about 2015 out of the University of Hawai’i, Manoa, Department of Botany, found that: “[O]f all the West Coast of the Big Island, the highest average percentage of tissue N [Nitrogen] and predicted N concentration was found in the surface samples of Keauhou Bay.” This study was</p>	<p>A Natural Resource Assessment was conducted for the Draft EIS (DEIS) by AECOS (Appendix C). Please refer to Section 4.6 of the DEIS for discussion of native species, endangered species, and critical habitat in relation to the KBMP. As discussed in the Natural Resource Assessment, no species listed as threatened or endangered by state or federal statutes were identified on any of the project parcels at Keauhou Bay. The potential exists that several listed species might transit or utilize the general area on occasion. The endangered Hawaiian monk seals (<i>Monarchus schauinslandi</i>) has been regularly reported from Kona waters. As stated in DEIS Section 4.6, if monk seals are detected within 300 ft of ongoing project construction, operations must cease and not continue until the animal has departed the area on its own accord.</p> <p>We are aware of the concerns related to wastewater contamination in the bay. A wastewater flow analysis has been conducted as part of the analysis for the DEIS. The flow projections are based on land use areas, unit</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>comprehensive and included the full West coast of the Island of Hawaii from the North tip to South Point.</p> <p>The study discusses Keauhou Bay in part as follows:</p> <p>Keauhou Bay nutrient-rich groundwater plumes demonstrated high values for nitrogen (5.0 to 5.9 615N values and high ulva (green algae) abundance in the bay. Ecologically successful green algae like <i>U. fasciata</i> are potentially invasive. Coastal waters near harbors, industrial complexes, and residential areas with nutrient- rich and/or fresh water input often have blooms of <i>Ulva</i> species that coat ships' hulls, cover pilings and shorelines, and restrict outflow pipes. <i>U. fasciata</i> is classified as a marine fouling organism, and studies in control and eradication are presently underway.</p> <p>The study further noted that:</p> <p>In Keauhou Bay the potential sources of anthropogenic nutrients include leaching cesspools, surface road and field runoff during rain events, fish biomass, golf course contribution and vessel borne and bilged biomass.<sup>3</sup></p> <p>These government and University of Hawaii analyses are admittedly dated, but as a frequent observer of Keauhou Bay and given the exhibits attached to this letter I would have to say the situation in Keauhou Bay has not improved and if anything worsened over the last eight years. The EIS should take a "hard look" at these problems and transparently assess them.</p> <p>D. <u>User Conflicts</u>. KS has developed the Keauhou Bay Management Plan ("KBMP") to "reorient uses at the bay and establish new place-based cultural education and revenue generating opportunities." The EISPN recognizes that Keauhou Bay is "highly used by residents, visitors, and community groups, which creates congestion and competing interests." KS then describes the purpose of the Project that is the subject of the EISPN is to: "develop resilient communities by stewarding the 'aina to support resilient economies, cultural landscapes, diverse learning, and career pathways." Concluding that:</p>	<p>counts and estimated population using demand rates from the State HAR Chapter 11-62, Appendix D. As described in DEIS Section 4.12.2, the Project is expected to generate an average daily flow of 50,925 gallons per day (GPD). It is expected that the He'eia Wastewater Treatment Plant (WWTP) will have capacity to accommodate the increase in wastewater flows. The All wastewater plans will conform to applicable provisions of the Hawaii Administrative Rules, Chapter 11-62, "Wastewater Systems."</p> <p>Thank you for your participation in the environmental review process.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>“The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the Management Plan process.” (EISPN 1-1)</p> <p>Pregnant in all of this is the potential for renewed conflicts between the customers of a 156-unit “Appropriate Boutique Resort.” Estimating an average of two to four people per unit could mean a daily occupancy of between some 300 to 600 guests. These people would come from very different backgrounds and have purposes in coming to Hawai’i that could well conflict with and overwhelm the residents of Hawai’i who now use Keauhou Bay for very different purposes. The EIS must take a “hard look” at these potential conflicts and offer transparent and effective alternatives to address them, including “no action” on the resort development.</p> <p>E. <u>Wastewater</u>. The EISPN briefly describes existing KS controlled sewage system. (EISPN 3-19 at Paragraph 3.19). It also describes the potential for “Unavoidable and Unresolved Impacts. (EISPN 4-2 at Paragraph 4.6). I will just note that when we paddle canoes past the condos north of the bay we can smell and see evidence of sewage effluent in the ocean. When we paddled south we now have the benefit of a similar experience off shore from the new million-dollar homes constructed a few years ago. The EIS should take a “hard look” at the effect a 156-unit resort will have on sewage entering Keauhou Bay.</p> <p><sup>1</sup> See, National Oceanic and Atmospheric Administration, NOAA’s National Ocean Service, Management &amp; Budget Office, Coral Reef Habitat Assessment for U.S. Marine Protected Areas: State of Hawaii: NW and Main Hawaiian Islands, Special Projects (February 2009). Last consulted April 22, 2022, at: <a href="http://www.coris.noaa.gov">http://www.coris.noaa.gov</a></p> <p><sup>2</sup> United States Environmental Protection Agency, Waterbody Quality Assessment Report Water Quality Assessment and TMDL Information, 2010 and 2014 Waterbody Reports for Keauhou Bay (Kona). Last consulted April 22, 2022,</p>	

**Table 7.2 DEA Summary of Comments and Responses**

<b>Comments</b>	<b>Commenter</b>	<b>Responses</b>
	<p>at: <a href="https://iaspub.epa.gov/waters/10/attains/waterbody/control?ipauid=HI7_13293&amp;pcycle=2014#attaininents">https://iaspub.epa.gov/waters/10/attains/waterbody/control?ipauid=HI7_13293&amp;pcycle=2014#attaininents</a></p> <p>The information at this site (now 8-years old) is listed as out-of-date, but the alternative site given for the information says that the data is not available for Keauhou Bay.</p> <p><sup>3</sup> See, Megan Daller, “Preventing the introduction and spread of nutrient driven invasive algal blooms and coral reef degradation in West Hawaii”, University of Hawai’i, Manoa, Department of Botany</p> 	

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		
<p>David and Jeanne Markley</p>	<p>Thank you for the opportunity to comment on the Keauhou Bay Management Plan Environmental Impact Statement Preparation Notice.</p> <p>We own a condominium unit in the Keauhou Resort that we use personally a substantial portion of the year and rent out as a STVR during the remaining time. We purchased this unit with the intent of making this our primary residence.</p> <p>We are strongly opposed to the proposed development associated with the Keauhou Bay Master Plan because we believe it will result in significant adverse impacts on living conditions for ourselves and our neighbors. While we understand the Kamehameha School's desire to gain higher and better use of their property, we believe the proposed development, particularly the construction of the Old bona Road as a through road connecting Kamehameha III Road (Kam III Road) with KaleioPapa Street will result in significant adverse traffic, parking, pedestrian circulation, safety, air quality and noise impacts on us and our immediate neighbors, as well as residents west of Ali'i Drive in this area.</p> <p>We oppose this development because we feel the proposed changes and uses are incompatible with the residential character of our neighborhood, particularly areas west of Ali'i Drive. We believe the tourist- based uses proposed in this plan will overwhelm the existing neighborhood and compound existing problems. We believe the construction of Old Kona Road to connect Kam III Road with KaleioPapa Street will result in a major shift in traffic volume away from KaleioPapa Street to Kam III Road with the associated panting, safety, noise and air quality impacts. This action would significantly erode the residential character of our neighborhood. We believe the impacts associated with these elements will result in impacts that will be significant even with typical levels of mitigation.</p> <p>Accordingly, we have reviewed the Keauhou Bay Master Plan Preparation Notice. Based on this review, we find that the current description of the</p>	<p>Thank you for your letter dated April 20, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statues Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed</p>

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Comments	Commenter	Responses
	<p>project and proposed environmental analysis is vague and insufficiently detailed to result in an adequate assessment of impacts and mitigation. Without this added detail, we consider the level of any environmental analysis to be programmatic. As such, further environmental analysis and mitigation will be required from the developer/contractor prior to moving forward with actual construction of any element of this master plan.</p> <p>Assuming that Kamehameha School intends to move forward with the current plan, we request that the project description be refined, the scope of environmental analysis be substantially expanded, and mitigation measures be developed and analyzed for effectiveness. This level of detail is necessary because our neighborhood incorporates a unique mix of activity. Attached is a summary of our request.</p> <p>Thank you for considering our request for additional work. Please respond to our comments as part of your public review process and to us by email.</p>	<p>to achieve the goal of developing resilient communities by stewarding the ‘āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>We understand that parking and circulation has been challenging in residential neighborhoods surrounding Keauhou Bay. Street capacity and traffic circulation was taken into consideration during the development of alternatives. The Project involves multiple design elements to improve overall circulation and alleviate congestion. The Project proposes to improve the Old Kona Road to support multi-model transportation options while also providing a linkage across the two sides of the Bay. The roadway is intended to be pedestrian orientated to serve as a key walking route for residents and resort guests to access the dining,</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>commercial, and recreational activities throughout the area.</p> <p>The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr &amp; Peers to identify and assess existing and future mobility option as well as potential traffic impacts generated by the Project (<i>Appendix E</i>).The MAR found that the implementation of the Project would not result in significant traffic impacts.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Emma Chandler</p>	<p>This is a letter in opposition to planned development in Keauhou Bay. The waters of the bay cannot sustain a surrounding growth as what is being proposed. It is having a hard time with sustaining the current usage.</p> <p>Keauhou Bay is culturally significant and deserves to be preserved as historically honored, not to be commercialized. The Bay hosts as a gathering place for our local community: fisherman, paddlers, divers and thriving volleyball community. All of these activities foster our youth development in positive ways.</p> <p>The list goes on as far as opposition goes. I personally have grown up in Keauhou Bay and have a deep gratitude and Love for the place and its consistently unchanged atmosphere. I have shared it with my family, and now my children enjoy the Bay.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>In closing, I support the protection of Keahou Bay by strongly declining development of hotels, bungalows and shops. Protect Keauhou by preserving it for local use, for our community, for the dedicated cultivation of cultural importance.</p> <p>Thank you for your time,</p>	<p>and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Garth and Carolyn Sime</p>	<p>Garth and Carolyn Sime live in Bayview Estates on the Big Island. We are deeply opposed to any expansion of the Keauhou Bay site. The congestion caused by additional hotel rooms will cause terrible harm to an already fragile</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>environment. The amount of tourists and the additional traffic is mind boggling.</p> <p>The additional on our water supply is a huge concern.</p> <p>Please do not proceed with any approvals on future projects in this area.</p>	<p>Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to</p>

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		<p>achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Section 4.12.1 of the Draft Environment Impact Statement (DEIS) provides detailed estimates of the average daily water demand for the various project components. In total, the Project will result in an average water demand of approximately 97,466.2 GPD. Based on these estimates, impacts to the public water supply are not expected.</p> <p>Water conservation measures will be implemented in design of the Project and may include, but not be limited to, the following: efficient irrigation systems such a drip system and moisture sensors, utilization of nonpotable water for irrigation, drought tolerant plants, and the use of Water Sense-labeled ultra-low flow water fixtures and toilets.</p> <p>Thank you for your participation in the environmental review process.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
<p>Harlan Miyoshi</p>	<p>My name is Harlan Miyoshi and I live in Kealakekua, HI.                      I am submitting testimony as a regular user of Keuhou Bay for swimming.                      Although I agree on the corridor access and the education portion of the proposal, I am against the building of the boutique hotel at the bay considering it would commercialize the area with more tourists which I am concerned about in terms of being able to access the bay with the increase in users that would probably come with the new hotel as well as the increased traffic, litter, sewer modifications that would be needed for such a project.                      Please reconsider that portion of the plan.</p>	<p>Thank you for your letter dated April 25, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your concerns related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Please refer to Chapter 4 of the Draft Environmental Impact Statement for a discussion on potential impacts and mitigation measures.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Holly Hokenson</p>	<p>I frequently go shore diving and freediving at Keauhou Bay. That is because I am a masters student studying environmental science and I am currently starting an observational study on the reef manta rays of Kona. Keauhou Bay has the most frequented cleaning station for manta rays that I have witnessed in the many countries I have been to observing manta rays. This is the original manta site in Kona and is therefore a crucial part of that community. But that is not all it is. Last time I went to Keahou I witnessed several families spread out across the grass hosting an Easter egg hunt for their children. At what point will we have no more public green spaces to share with our families in that manner? I ask you, please. Do not build more resorts, do not build a through road, do not pave over more living things. Any of these actions will definitely negatively impact this incredibly special ecosystem in the bay as well as the incredibly important system of our community.</p>	<p>Thank you for your letter dated April 26, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand</p>

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	Best fishes,	<p>and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Chapter 3 of the Draft Environmental Impact Statement provides a detailed description of the Project. The Project proposes to enhance public access and</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>opportunities for public recreation by increasing open space and establishing a recreation corridor. This corridor would allow greater opportunities for gathering and family events such as those you mentioned.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Jack Wilken</p>	<p>I am an owner of a unit in Keauhou Resort at 78-7039 Kamehameha III RD just north of the proposed development at Keauhou Bay.                      We also own a small boat that we keep for our own recreational purposes at the current boat storage yard just south of Keauhou Resort and north of Keauhou Bay.</p> <ol style="list-style-type: none"> <li>1. You should do something to encourage both roads into the new development to be used so that traffic is not just centered on Kamehameha III.</li> </ol> <p>As well, do whatever traffic modifications are necessary to keep traffic slow on Kamehameha III below Alii Drive.</p> <ol style="list-style-type: none"> <li>2. Maintain the current boat storage yard (with the advertised improvements) as well as increase the number of boat trailer parking spaces in the launch area.</li> </ol>	<p>Thank you for your letter dated April 13, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. We offer the following responses.</p> <p>The KBMP involves reestablishing the Old Kona Road as the primary vehicle thoroughfare through the bay to direct traffic away from the Kamehameha III birth site. The new thoroughfare will allow vehicular and pedestrian access to the Keauhou bayfront from both Kaleiopapa Street and Kamehameha III Road. The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr &amp; Peers to identify and assess existing</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>and future mobility option as well as potential traffic impacts generated by the Project (<i>Appendix E</i>). The MAR found that the implementation of the Project would not result in significant traffic impacts.</p> <p>Kamehameha III Road is a two-lane County collector road connecting Ali'i Drive to the Hawai'i Belt Road. In the vicinity of the Project Area, Kamehameha III Road transitions to a local road with a speed limit of 25 mph makai of Ali'i Drive. As the roadway is under the jurisdiction of the County, KS does not have the authority to install traffic calming devices or other speed controls.</p> <p>We acknowledge your concern that additional parking is needed for commercial users and residents. One objective of the Project is to improve existing parking areas to enhance their capacity, safety, and security. DEIS Section 3.2.5 discusses the Project's proposed parking improvements. After full build out of the Project, the supply of parking for both the general public and for boat trailers is expected to increase (88 new parking stalls and 23 new boat trailer parking stalls).</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
<p>Jane Schmitt and Richard Crack</p>	<p>Keauhou Bay is a precious natural resource that provides recreation for countless ocean enthusiasts, including: fishers, paddlers, paddle boarders, snorkelers, divers, &amp; ocean recreation for local children &amp; their families. To sully this pristine bay with dwindling water quality, heavy traffic, run-off and an overload of humans- is nothing short of a travesty. Planning for another resort -catering to monied tourists- no matter how “boutique” it claims to be, is the antithesis of what K.S.’s management of Keauhou bay should be doing. Many of the homes and condos on the north side of Keauhou Bay have cesspools, or septic tanks with inadequate leach fields- that allow human waster to seep into the Bay. This alone needs to be rectified before any consideration of any further development next to Keauhou Bay.</p> <p>When is the appropriate time for Kamehameha Schools administration to declare that enough development has taken place on this small - but outstanding- bay? K.S. Trust is already the tenth richest charity in the U.S. (by some accounts); can you not be satisfied with all of the Hawaii holdings you already possess? Please carefully consider the long-term detrimental impacts that a 150 room resort would have on the quality of life for the residents who utilise this bay on a regular basis and for the varied marine life that call it home.</p>	<p>Thank you for your letter dated April 13, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai’i Revised Statues Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS’ mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the ‘āina to support resilient</p>

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		<p>economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>We are aware of the issues related to contamination caused by cesspools in the vicinity of the bay. All new facilities associated with the Project will be serviced by sewer utilizes and treated at the He'eia Wastewater Treatment Plant.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Janet Matlock</p>	<p>Mahalo for this opportunity to comment on the proposed Management Plan Overview for Keauhou Bay.</p> <p>I am a resident in Kailua Kona and live close to Keauhou Bay. As residents, my family and I utilize the bay frequently, and enjoy our interactions with others in the local community.</p> <p>I agree that the sacred birthplace of Kamehameha III is in need of honor beyond what is currently given, although I do commend the Daughters of Hawai'i for stepping forward to preserve this site when others did not.</p> <p>I emphatically do not agree that the way to elevate this historic and magical place and provide cultural education is to further degrade this precious environment. Development of high-end "bungalows" and restaurants and adding commercial spaces will only degrade the fragile ecosystem of the bay,</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your concerns related to commercial development. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>not preserve it. So little is left for local activities (volleyball, family gatherings, canoeing, paddle boarding, swimming, etc.).</p> <p>I observed the talk story held via Zoom and am in agreement and alignment with the mana'o shared in that meeting, so will not repeat those points here, but please know they are echoed in this email by reference.</p>	<p>support the management of the bay and its resources. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process. The income generated from activities at Keauhou Bay – including the resort – will be used to support KS' mission as well as the educational and cultural components of the Keauhou Bay Management Plan.</p> <p>Thank you for your participation in the environmental review process.</p>
Jeanette Espinal	<p>My daughters participated in the Keauhou canoe club all thru junior high and high school. We had picnics, family birthday parties and evening meditations at Keauhou bay. It's private, clean and quiet. Sacred.</p>	<p>Thank you for your letter dated April 28, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP)</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>It would be a shame to pollute this area for capital gains only a few would enjoy. In my opinion and so many, up-building such a beautiful area that still amplifies the beauty of Hawaii is absolute shame and disgrace to the land.</p> <p>Please take into account the history of this area, how the local families living and using this bay comment on such growth. There is a magic about the way it is rn! The bay is clean and clear of debris. You see mantas, and all sorts of ocean life in this bay, because its quiet and clean.</p>	<p>prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas</p>

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		<p>around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Jeanne Alford</p>	<p>Do not invest in any new commercial lodging at Keauhou Bay. This is a sacred and beautiful place that does not need more development.</p> <p>Developers want to find these gems on this island and immediately invest in them (Punalu'u, for one example).</p> <p>I get it, you're an investment company and that's your bread and butter. But don't look for places to build things where you don't belong and are not wanted.</p> <p>Keep this bay as is. Every Hawaiian beach, bay or town does not need to be built up.</p> <p>It's about the money (International Market Place, for another example).</p> <p>Seek out another place, hopefully not in the state of Hawaii, to make your money.</p> <p>Keauhou Bay deserves respect. Keep it local. Keep it country. Keep it the neighborhood paradise that it is. Just because you have the money and the mission does not mean you cannot live pono.</p>	<p>Thank you for your letter dated April 17, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision,</p>

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		<p>the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the ‘āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Jeff Caufield</p>	<p>Thank you for the opportunity to provide comments. My name is Jeff Caufield and I am the owner of the house located at 78-7106 Kamehameha III Drive and as such we are the closest house to the proposed activities. Unfortunately, as I was coaching volleyball during the zoom meeting, I am submitting written comments.</p> <p>I’d first like to go into my background. I have an undergraduate degree in environmental studies from the University of California, Santa Barbara. During college I worked for the Santa Barbara redevelopment agency wherein I assisted in the redevelopment design and planning of the lower State Street in Santa Barbara. Also during undergrad and law school I worked for an environmental consulting firm. I graduated from law school in 1993. During law school I interned in the legal counsel’s office at the U.S. Department of Interior. For the past 29 years my practice has specialized in environmental law, which includes an emphasis of environmental impact statements and reports. Prior Court rulings have acknowledged my expertise</p>	<p>Thank you for your letter dated April 12, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai‘i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand</p>

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	<p>in this area and that over the last 22 years I have never lost of case related to an environmental impact statement or report. I also lecture both nationally and internationally on various environmental topics, including lectures related to environmental impact reports and statements. You can access my law firm website at <a href="http://www.caufieldjames.com">www.caufieldjames.com</a>. In sum, I both have the education, experience and Court recognized expertise in the subjects I am addressing herein.</p> <p><b>I. THE PROJECT WILL CAUSE SIGNIFICANT NEGATIVE TRAFFIC IMPACTS</b></p> <p>With the addition of 150 resort bungalows, that average 1,800 square feet in size, and assuming, at a minimum, one to two cars per bungalow that translates to an additional 150-300 cars per day on lower Kamehameha III Drive. (Note: referring to a 1,800 square foot structure as a “bungalow” is misleading as they are significantly larger than most local 3 bedroom homes, in reality the proposal is to build 150 homes attached to a resort.) As with most vacationers, the number of car trips to/from the bungalow will typically average a minimum of 2 trips (4 going/coming) per car per day. Thus, the resort bungalows will result in a negative impact of between 600/1,200 additional cars per day on lower Kamehameha III road. Assuming that the car trips will be concentrated during primarily daylight hours (assuming 16 hour primary concentration period) the increase in vehicular traffic on Kamehameha III Drive will average between 37.5 – 75 cars per hour. In sum, the project proposes to add, at a minimum one additional car per minute everyday for 16 hours a day on lower Kamehameha III Drive. Additionally, the project proposes a further significant increase in traffic by paving and extending Old Kona Road and opening it to major vehicular traffic. Currently, boats seeking to launch and/or visitors at the Outrigger Hotel have to completely drive around the Keauhou Bay to access the intersection of Alii Drive and Kamehameha III road. The project proposes to create a “short cut” that will channel existing vehicular traffic from the south side of the bay to lower Kamehameha III Drive that will likely increase vehicular traffic substantially. With the addition of new commercial and dining in the area, the traffic will only be worse. In sum, while the project proposes to address</p>	<p>and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS’ mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the ‘āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>We understand that parking and circulation has been challenging in residential neighborhoods surrounding Keauhou Bay. Street capacity and traffic circulation was</p>

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	<p>fictional “congestion” the project does the exact opposite by likely increasing vehicular traffic on lower Kamehameha III Drive by likely an order of magnitude, if not more. As for vehicle “congestion” purportedly around boat launch area, there is very little “congestion” aside from early mornings when boats are lined up to launch. That is typically of any launch and the project cannot and does not propose to address this issue. Thus, the “scope” and notice of preparation is extremely misleading to public in what it purports to accomplish.</p> <p><b>II. THE PROJECT WILL CREATE SIGNIFICANT CONGESTION OF PEOPLE IN AND AROUND KEAUHOU BAY</b></p> <p>Having lived in the house closest to the project for the past 5 years and visited Keauhou Bay fairly regularly for the past 18 years the representation that there exists “congestion” at the Keauhou Bay from people is simply untrue and misleading. Currently, the canoe club generally has practices in the mornings at which time there may be 10-20 people that generally meet, launch canoes and paddle out within 15-20 minutes of arrival. When the paddlers return, they typically are gone within 20 minutes. On average during a typical summer day, there may be 2-4 people swimming/paddling in Keauhou Bay and maybe one or two people on the shore. It is not unusual to not see anyone on the bay or shore for several hours each day. A time when the number of visitors to the bay may increase is typically during the loading/unloading of the Fairwinds. However, the guests typically arrive roughly 30 minutes before launch, line up about 5 minutes before launch and then are gone for hours. When they return, they are typically gone within 10-15 minutes. The guests do not potentially impact cultural resources nor do they cause “congestion” of uses at the bay. Off the water there is usually adults/kids playing volleyball on the single sand court in the afternoon, people fishing from the dock area and paddling practice in the afternoons. After observing the current usage on a daily, weekly and monthly basis there is no “congestion” around the bay. Occasionally, primarily on weekends, local families due host BBQs at the south side park and that may increase the number of people using the bay. However, this should not be considered to be “congestion” but simply typical local usage and enjoyment of</p>	<p>taken into consideration during the development of alternatives. The Project involves multiple design elements to improve overall circulation and alleviate congestion. The Project proposes to improve the Old Kona Road to support multi-model transportation options while also providing a linkage across the two sides of the Bay. The roadway is intended to be pedestrian orientated to serve as a key walking route for residents and resort guests to access the dining, commercial, and recreational activities throughout the area.</p> <p>The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr &amp; Peers to identify and assess existing and future mobility options as well as potential traffic impacts generated by the Project (<i>Appendix E</i>). The MAR found that the implementation of the Project would not result in significant traffic impacts.</p> <p>The mauka / makai corridor is proposed to improve public access and to enhance the areas for educational and cultural activities.</p>

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Comments	Commenter	Responses
	<p>the bay. The project proposes to add 150 bungalows, a restaurant and commercial vendors at the bay. Assuming that each bungalow has only 4 people (which is probably low based on the square footage) you'll likely have a minimum of another 600 people per day potentially in and around the bay. This will, at a minimum, at least double or quadruple the daily usage around the bay (not counting the additional crowds using the restaurant and commercial venues.) Thus, the project as proposed can only create congestion comparable to what you can see every weekend at Magic Sands but on a daily basis.</p> <p><b>III. THE MAUKA/MAKAI OPEN SPACE</b></p> <p>The Keauhou Canoe Club was built by the local volleyball players that enjoyed paddling around 40 years ago. Both the Keauhou Canoe Club and the volleyball players have paid out of pocket for 40 plus years to maintain the park area where the canoe club is located and for maintenance of the sand volleyball courts. To this day the volleyball players are always willing to help the club move canoes and many of the paddlers, and in particular the kids, will stay and play on the volleyball courts after practice. Some of the best local paddlers such as Kua Nolan grew up paddling on the bay and then playing volleyball on the sand courts right after practice. It would appear that the plan is to "reorient" the canoe club but provides no specificity upon which comment can be made. For the past 40 plus years there has been two sand volleyball courts on the east end of the bay below the canoe club. Due to both the tsunami and an episodic rainfall the western sand volleyball court was damaged and is in need of repair. Currently, the remaining sand volleyball court is used on a daily basis by locals. In particular, there are volleyball classes for the local kids on almost a daily basis. Any plan that would not include restoring both volleyball courts would be devastating to the local community and in particular the kids that are learning how to play volleyball on the court. In Kona, there is a sand volleyball court at Coconut Grove that extremely heavily used by the locals, a sand volleyball court that is primarily used by tourists at Magic Sands and the sand courts at Keauhou. Thus, it is absolutely vital for the sand volleyball courts to be restored or else the local community, and in particular the kids, would lose</p>	<p>DEIS Section 3.2.3 describes the Project's aim to visually and spatially consolidate the mauka and makai recreation areas to create an expanded shoreline park through landscape improvements. Improvements aim to expand public access to the shoreline through KS-managed lands by establishing a mauka to makai recreation corridor adjacent to the existing canoe hālau; this will require a reconfiguration of the existing sprawling canoe uses and volleyball enthusiasts along the immediate bayfront area. Improvements include the removal (and potential relocation) of the unsanctioned sand volleyball court to provide a walkway with native landscaping accenting and open recreational space. The repurposed sandy volleyball area mauka of the main seawall will be regraded and planted with an irrigated grass lawn to limit erosion and create a more sustainable open-lawn environment. At present, KS does not have an agreement with any entity for use of the volleyball court. Further complicating the matter, a portion of the land underneath the court is within the County right-of-way and</p>

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	<p>one of the few places they can learn and play. In areas like California, sand volleyball is a boys and girls high school sport. If the courts were to be repaired and restored, the local high schools could host matches on the Courts. This is particularly critical in that girls beach volleyball is now a collegiate sport such that girls wanting to play beach volleyball in college need a place to play and train. Currently, there is no place for the high school kids to play and train on a regular basis other than the Keauhou Courts. Hawaiian volleyball players have enjoyed success on the national and international level, including gold medals at the Olympics and it is deeply ingrained in the modern hawaiian culture. The volleyball players are always very welcoming to other locals and visitors that want to join in and play. However, in the past when there were two courts it enabled different levels of players to play at the same time with the people that wanted to play in groups on one court and the players that wanted to play more competitive doubles and/or four verses four playing on the other court. On most weekends, local families host barbeques on the east side grass park and both use the bay and the sand volleyball court. Currently, with only one court there can be a couple of players waiting to play at times. The scoping document asserts, without evidence, the following:</p> <p>“Although there is legal public access to the shoreline, canoe and volleyball activities dominate the shoreline area and create a perception of exclusivity. This, coupled with the hustle and bustle of ocean commercial operations catering mainly to visitors cause many local families, with some long-standing generational ties to the bay, to no longer feel welcomed - ultimately disconnecting them from the wahi pana.” (pg. 2-6.)</p> <p>The proposal to at least quadruple the number of visitors accessing Keauhou Bay through the 150 bungalows, new commercial venues and restaurant would take the usage, which currently is largely locals, and shift it to commercial visitor access will worsen the perceived problem, not improve it. Currently, every weekend there are local barbeques and local parties at the grassy park on the north side of the bay. In the past when the 2<sup>nd</sup> sand court was present, and there was nice sand behind the wall, there was always people setting up picnics on the weekends along the wall. However, with the</p>	<p>therefore outside of KS ownership. KS is committed to the continued consultation with elected officials and representatives of the Kona area to discuss how outdoor recreational activities such as volleyball can be planned in more appropriate areas.</p> <p>We acknowledge your concern that additional parking is needed for commercial users and residents. One objective of the Project is to improve existing parking areas to enhance their capacity, safety, and security. DEIS Section 3.2.5 discusses the Project’s proposed parking improvements. After full build out of the Project, the supply of parking for both the general public and for boat trailers is expected to increase (88 new parking stalls and 23 new boat trailer parking stalls).</p> <p>Potential land erosion due to the implementation of the KBMP has been addressed in the Draft Environmental Impact Statement (DEIS). DEIS Section 4.5, describes stormwater runoff peak flow estimates for both existing conditions and with project implementation. At present, portions of the KS properties at</p>

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	<p>sand largely gone and sharp gravel on top of the hard packed ground, the locals no longer use the area behind the wall as frequently for picnics (although there typically is at least 1 family that may use the sand/gravel area behind the east end by the volleyball court on the weekends.) If sand is brought back in and the 2<sup>nd</sup> court placed nearer to the existing court, there will be a nice 40' x 100' area behind the wall on the east end for local families to enjoy. In sum, the plan needs to re-fill in the sand area behind the south break water wall, rebuild both volleyball courts and create a nice sand/picnic area behind the wall.</p> <p><b>IV. PARKING CONGESTION IS ONLY GOING TO GET WORSE</b></p> <p>Currently, parking on the south side of the bay can be congested due in large part to the lack of parking for vehicles with boat trailers. Development of a vehicle/trailer parking lot on the south side is long overdue. The number of tourists parking on the south side is comparatively limited. On the north side of the bay there is generally street parking off Kamehameha III Drive and there is designated parking for the Fairwinds tours in an unimproved lot on the south side of the bay. The parking on the north side became more limited when someone made the decision to restripe the cul-de-sac and have only parking for 5 cars when the cul-de-sac used to regularly park 10+ vehicles. Nevertheless, even on the weekends when there are large barbeques at the park the parking on Kamehameha III Drive rarely requires parking more than a block to the water. However, with the addition of a least 300 cars through the bungalows and new commercial venues parking is going to get a lot worse. As has been experienced with the other hotels that charge \$20 or more per day for parking, guests at the hotels simply look for on-street parking to save money. Thus, while the average number of cars parked everyday on Kamehameha III drive is probably less than 10, the plan will likely place another 50-100 cars per day parking on Kamehameha III Drive with bungalow guests looking to save money on parking. As a result, the plan, as currently proposed can only lead to significantly worse parking issues on the north side of the bay.</p> <p><b>V. INCREASED POLLUTION KEAUHOU BAY</b></p>	<p>Keauhou Bay are unmanaged and susceptible to runoff and erosion. The Project is expected to result in long-term benefits as permanent sediment control measures and stormwater infrastructure would minimize runoff and erosion. Those strategies may include but are not limited to detaining, retaining and infiltrating runoff into the ground.</p> <p>DEIS Chapter 3 provides a detailed description of the Project inclusive of restoration activities of Ho'okūkū Pond. As part of the improvements in the heritage corridor, the Project will expand the remnant anchialine pond and restore ecological systems within Ho'okūkū Pond to enhance conditions for native species to thrive. DEIS Section 4.5 describes potential impacts and mitigation measures to protect surface water at the Project Area.</p> <p>Thank you for your participation in the environmental review process.</p>

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	<p>The project proposes to add significant numbers of both people and vehicles in and around Keauhou Bay. This includes large paved parking lots for both the bungalows and other parking. Currently, other than the few cars that park on the street, the cars that park to use the Fairwinds park in unimproved lots. When it rains, the unimproved lots can be a non-point source of pollutants that likely should have some runoff controls. However, the majority of time it rains there is no runoff from the existing unimproved parking as the water simply soaks into the ground. The addition of acres of paved parking lots, which are well documented sources of non-point source pollutants such as heavy metals and hydrocarbons that will be channeled into the bay is not even mentioned in the scoping document and should not be ignored.</p> <p><b>VI. THE PROJECT PROPOSES TO POTENTIAL DESTROY IMPORTANT FRESHWATER CULTURAL RESOURCES</b></p> <p>Historically, Keauhou Bay was used by the original Hawaiians, in part, due to the presence of freshwater resources from springs in the area. Springs are naturally recharged by rainwater soaking into the ground. Very little of the project area is currently paved such that the freshwater springs continue to be recharged by rainfall. However, with the addition of many acres of impervious surfaces through the resort and acres of parking lots, the potential recharge sources may be eliminated and the springs negatively impacted. The scoping document does not propose to address the negative impacts to the local springs from the project.</p> <p><b>VII. TRAFFIC IS BEING CHANNELED INTO CULTURALLY SENSITIVE AREAS</b></p> <p>The Old Kona Road paving and extension will funnel traffic directly into the areas of the project that are deemed to be culturally sensitive. Nothing in the proposed scoping document purports to address the fact that vehicular traffic is being funneled into culturally sensitive areas.</p> <p><b>VIII. CONCLUSION</b></p> <p>The scoping document appears to be very misleading in stating purported “issues” as if they were facts and then purporting to “solve” the problem when in fact the project, as proposed, will only create problems where none</p>	

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	<p>exist. The foregoing comments are just the “tip of the iceberg” with respect to the problems with the scoping document and the many misrepresentation and misleading statements.</p>	
<p>Jenn Murphioka</p>	<p>Please do not build at Keauhou Bay. There is already a resort and many timeshares down in Keauhou. Keauhou Bay is important to my family. We spend so much of our time here. It is the perfect place to cruise with my family - the beach access is perfect for children. On Sundays, we take out the paddleboard and OC-1. It is our home away from home. I paddle for Keauhou Canoe Club. Our hālau is here. I spend at least 3 days here each week. I love seeing my students and their families enjoying the beach and water at Keauhou Bay.</p> <p>I do not want to see beach "bungalows" where our hālau currently stands. We do not need anymore oceanfront beach bungalows - visitors have plenty of other beachfront options, if that is what they are looking for.</p> <p>Do not build another resort. There is one right around the corner. Stand up for the people that live here. Let our voices be heard.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your concerns related to the boutique resort. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational</p>

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		<p>values that were identified during the KBMP process. The income generated from activities at Keauhou Bay – including the resort – will be used to support KS’ mission as well as the educational and cultural components of the Keauhou Bay Management Plan.</p> <p>Chapter 3 of the Draft Environmental Impact Statement provides a detailed description of the Project. The location for the proposed boutique resort is mauka of Old Kona Road. The canoe hālau is viewed as an important community and cultural resources and will remain in its existing location.</p> <p>Thank you for your participation in the environmental review process.</p>
Joe Robinson	<p>I object to the proposal for development of a new resort area at Keauhou Bay. We have the Outrigger resort in that area for many years, and many other rentals in the area as well at under utilized Keauhou shopping center with many vacancies for retail We do not need more development in the area at this time.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai‘i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to</p>

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		<p>maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>

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<p>John and Kathy Arroyo</p>	<ol style="list-style-type: none"> <li>1. My wife and I live along Alii Drive, at the intersection with Kaleiopapa Street. The constant daytime <u>traffic noise</u> and air pollution has steadily worsened the past few years. Opening the concrete bypass (excellent sustainable pavement material choice) created a high-speed boulevard, despite the useless 35MPH speed limit sign. <u>Southbound vehicles</u> especially, on Alii Drive, <u>are potentially deadly</u> for all of us who need to exit the Keauhou Akahi condominium complex. (I urge you to try to exit the property turning left at that blind curve, northbound. Say your prayers.) Expanded development at Keauhou Bay will simply attract more vehicles to an area that already fosters <u>excessive car &amp; truck traffic</u> and noise.</li> <li>2. Hawaii Island does not have plentiful sources of fresh water to support further development. Decent <u>drinking water</u> supplies are <u>strained</u>.</li> <li>3. It is no secret that the Kona/Kohala (western) side of the island is in dire need of extensive expansion of <u>sewer-treatment</u> capacity.</li> </ol> <p>Maintenance and improvement of <u>existing</u> features at Keauhou Bay would make sense.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. We offer the following comments:</p> <p>We understand that parking and circulation has been challenging in residential neighborhoods surrounding Keauhou Bay. Street capacity and traffic circulation was taken into consideration during the development of alternatives.</p> <p>The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr &amp; Peers to identify and assess existing and future mobility option as well as potential traffic impacts generated by the Project (<i>Appendix E</i>).The MAR found that the implementation of the Project would not result in significant traffic impacts.</p> <p>Section 4.12.1 of the Draft Environment Impact Statement (DEIS) provides detailed estimates of the average daily water demand</p>

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		<p>for the various project components. In total, the Project will result in an average water demand of approximately 97,466.2 GPD. Based on these estimates, impacts to the public water supply are not expected.</p> <p>Water conservation measures will be implemented in design of the Project and may include, but not be limited to, the following: efficient irrigation systems such a drip system and moisture sensors, utilization of nonpotable water for irrigation, drought tolerant plants, and the use of Water Sense-labeled ultra-low flow water fixtures and toilets.</p> <p>A wastewater flow analysis has been conducted as part of the analysis for the Draft Environmental Impact Statement (DEIS). The flow projections are based on land use areas, unit counts and estimated population using demand rates from the State HAR Chapter 11-62, Appendix D. As described in DEIS Section 4.12.2, the Project is expected to generate an average daily flow of 50,925 gallons per day (GPD). It is expected that the He'eia</p>

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		<p>Wastewater Treatment Plant (WWTP) will have capacity to accommodate the increase in wastewater flows.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>John Knoebber</p>	<p>I write to voice my opposition to any planned removal of the volleyball court at Keauhou Bay. I have lived here for 8 years; and I have enjoyed playing volleyball there on many occasions. Also, I have made friends there with people from all walks of life. Also, I believe there are already far too few, safe places like this for friends and family to gather and be active. Perhaps any renovation could leave room for at least 1-2 courts?</p>	<p>Thank you for your letter dated March 30, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>At present, KS does not have an agreement with any entity for use of the volleyball court. Further complicating the matter, a portion of the land underneath the court is within the County right-of-way and therefore outside of KS ownership. KS is committed to the continued consultation with elected officials and representatives of the Kona area to discuss how outdoor recreational activities such as volleyball can be planned in more appropriate areas.</p> <p>Thank you for your participation in the environmental review process.</p>

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<p>Julia Benkofsky-Webb</p>	<p>I have recently learned that the continuation of one of our community treasures in West Hawaii is in jeopardy. It has been announced that Kamehameha Schools' plans to “reinvigorate and transform” 29 acres at Keauhou Bay will include the removal of the much used and loved beach volleyball court in this area.</p> <p>It is clear to me, from speaking with friends who play weekly at this court—one of whom has been using the facility for 30 years—that this would be a huge loss to the community. Residents of all ages play at this court daily, and tournaments have been held there. Additionally, the sand courts at Keauhou are currently being used by several different coaches to run clinics and to train children that are seeking college scholarships in beach volleyball.</p> <p>The information contained in <i>The Environmental Notice</i> of March 23 offers several ways that the proposed changes to the 29 acres at Keauhou Bay will be beneficial to the community, including: “The new reconfiguration will. . . promote high quality educational experiences for all.” The volleyball court has been providing high quality educational experiences—on the physical, mental and spiritual levels—for over five decades. I implore you to consider how you may save the court at its present location or to move it where it may continue to serve untold numbers of our residents.</p>	<p>Thank you for your letter dated April 3, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai‘i Revised Statutes Chapter 343.</p> <p>At present, KS does not have an agreement with any entity for use of the volleyball court. Further complicating the matter, a portion of the land underneath the court is within the County right-of-way and therefore outside of KS ownership. KS is committed to the continued consultation with elected officials and representatives of the Kona area to discuss how outdoor recreational activities such as volleyball can be planned in more appropriate areas.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Ka'eo Bertelmann</p>	<p>Great Job folks!</p> <p>I think you're on to something truly special, and I applaud your endeavors for Keauhou.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan prepared pursuant to Hawai‘i Revised Statutes Chapter 343.</p> <p>We appreciate your support of the Project. Thank you for your</p>

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		participation in the environmental review process.
Kathleen McMillen	<p>I find it questionable that Kamehameha Schools is wrapping the development of a high-end resort in the envelope of honoring the Kamehameha III birthplace. It is smart of them to get the buy-in of the Daughters of Hawaii, who are the stewards of the Kamehameha III monument. I wonder if it was mentioned to the Daughters that once the land clearing starts for the resort area, one good rain will cause silt and debris to flow over the cliff onto the sacred monument and park, and, quite conceivably, into the adjoining ocean, fouling the already fragile waters of Keauhou Bay. There will be promises of erosion control and other mitigations but then a big rain comes along and excuses will be made that it was a 50-year or 100-year storm, so it couldn't be helped. Many times over the last 30 years I have seen failed erosion controls and silting of shoreline waters from construction projects.</p> <p>May I remind you that several waterfront homes on the north side of this bay have only cesspools. And even the few that have septic tanks are at too low an elevation and likely are too close to the ocean to have adequate leach fields, thus adding to the bacteria levels in the ocean. This problem is compounded by runoff after it rains. Absolutely no improvements should be made near Keauhou Bay until the sewage problem is resolved by getting these parcels connected to the nearby local private sewer system or the County sewer lines, if the private system is not workable.</p> <p>Recreational use of Keauhou Bay is heavy. Parking is a disaster for individuals who live in the community. The plan put forth develops slightly better boat parking but nothing specific for vehicles of the commercial boat patrons, nor locals. Many boats, both commercial and personal, launch there every day. Take a look at the boats and people who flock there between 6 and 10 am. Many outrigger canoes, paddleboarders, and swimmers use this bay every day. The State Clean Water Branch does occasional monitoring of the bay waters showing average bacteria counts are rising over the years. After very heavy rains the bay occasionally turns green from algae blooms creating unhealthy conditions for users of the bay. Added development stresses to</p>	<p>Thank you for your letter dated April 7, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed</p>

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	<p>this bay may reverse its health permanently. Do we really want to add to the already fragile and congested conditions with a resort that only one-percenters can afford to enjoy? At least the old Keauhou Beach Hotel provided affordable rooms for Kama’aina on island and for family visiting from other islands. It also was an inappropriate land use but at least it provided some benefit. Can we not learn from why the Keauhou Beach Hotel and Kona Lagoon Hotel were eventually demolished? Just because you have the zoning for resort use, doesn’t mean it is the best use of the land.</p> <p>In 2008, Kamehameha Schools said this when demolishing these hotels to add a more appropriate cultural park: “Our charter for future development here is to make things pono, or right, to solve the mistakes of the past and move ahead. We want to make sure that any and all future development in Keauhou, first and foremost, is culturally correct.” Kamehameha Schools, please put your money where your mouth is.</p> <p>I say to Kamehameha Schools, advocate for getting those parcels on the north side of the bay onto a local sewer system and then implement the management plan without building the resort. Honor the Kamehameha III monument, be good stewards of the land and ocean but find a more appropriate use of the vacant resort zoned land that honors the Hawaiian children you represent.</p> <p>Source of Kamehameha Schools quote:  <a href="https://www.travelweekly.com/Hawaii-Travel/Preservation-key-goal-in-Keauhou-redevelopment">https://www.travelweekly.com/Hawaii-Travel/Preservation-key-goal-in-Keauhou-redevelopment</a></p>	<p>to achieve the goal of developing resilient communities by stewarding the ‘āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>We are aware of the issues related to contamination caused by cesspools in the vicinity of the bay. All new facilities associated with the Project will be serviced by sewer utilizes and treated at the He’eia Wastewater Treatment Plant. Please refer to Section 4.12.3 for further discussion of wastewater.</p> <p>Potential land erosion due to the implementation of the KBMP has been addressed in the Draft Environmental Impact Statement (DEIS). DEIS Section 4.5, describes stormwater runoff peak flow estimates for both existing conditions and with project implementation. At present, portions of the KS properties at Keauhou Bay are unmanaged and</p>

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		<p>susceptible to runoff and erosion. The Project is expected to result in long-term benefits as permanent sediment control measures and stormwater infrastructure would minimize runoff and erosion. Those strategies may include but are not limited to detaining, retaining and infiltrating runoff into the ground.</p> <p>We acknowledge your concern that additional parking is needed. One objective of the Project is to improve existing parking areas to enhance their capacity, safety, and security. DEIS Section 3.2.5 discusses the Project’s proposed parking improvements. After full build out of the Project, the supply of parking for both the general public and for boat trailers is expected to increase (88 new parking stalls and 23 new boat trailer parking stalls).</p> <p>Thank you for your participation in the environmental review process.</p>
Kathy Roney	<p>I am a resident of Keauhou Bay and would like to share with you my concerns about the revised KBMP.</p> <p>For many years Kamehameha Schools has been a very poor steward of the land and irreplaceable priceless cultural heritage sites along the Keauhou/Kahaluu corridor and it bothers me that instead of changing that, you are moving on to new lands, not taking care of and managing the existing commercial space that isn’t overly success to date.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai’i Revised Statues Chapter 343.</p>

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Comments	Commenter	Responses
	<p>It is clear that this plan does not take in account the same Hawaiian values and kuleana that my Kupuna taught and ingrained in my being. In my lifetime, I went from camping at Turtle Bay with my Uncle Kaukau to watching greed pave every inch of `Oahu. I do not want to see the last peaceful island disappear and become just another Waikiki.</p> <p>What are we teaching our keiki, when we continue to cater to tourist, taking the last bay in Kona that is not overdeveloped and making it another overcrowded tourist attraction. Where does it stop? At what point does 'underachieving financially' take a back seat to our kuleana to the land, our keiki and to our future as Hawaiians.</p>	<p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational</p>

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Comments	Commenter	Responses
		<p>values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Kilihea Inaba</p>	<p>My name is Kilihea Inaba, I am from Kaloko, Kona. I was hoping you could answer a few questions for me regarding the KS Keauhou Bungalows project set to go to the LPC:</p> <p>1) Where exactly is this proposed to be built? And how large is the area of which it will occupy?</p> <p>2) What are the waste/ sewage plans for these bungalows?</p> <p>3) Has no other project been proposed by KS or to KS of how to generate income in this region without having to develop more land that will likely not be utilized by kanaka/ the local population?</p>	<p>Thank you for your letter dated April 19, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. We offer the following responses to your questions:</p> <p>The Project Area is comprised of fourteen distinct TMK parcels encompassing roughly 29 acres distributed around the historic and culturally significant Keauhou Bay. The Project Area spans two ahupua'a (traditional Hawaiian land division typically extending from mountain to sea): Keauhou 1 (located to the north) and Keauhou 2 (located to the south) in the North Kona District of the Island of Hawai'i.</p> <p>A wastewater flow analysis has been conducted as part of the analysis for the Draft Environmental Impact Statement (DEIS). As described in DEIS Section 4.12.2, the Project is expected to generate</p>

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		<p>an average daily flow of 50,925 gallons per day (GPD). It is expected that the He'eia Wastewater Treatment Plant (WWTP) will have capacity to accommodate the increase in wastewater flows.</p> <p>As the steward of approximately 54 acres at Keauhou Bay, KS has specific kuleana to maintain and support the management of the bay and its resources. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process. Multiple alternatives to the proposed Project are presented in DEIS Chapter 6.</p> <p>Thank you for your participation in the environmental review process.</p>

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Kimmy Gay	<p>My name is Kimmy Gay and I have been playing volleyball at Keauhou Harbor since 1988. For the past 2 years I have been organizing a free quads league for teenagers 4 days a week (Sunday, Monday, Thursday, and Fridays). I pick up a lot of the kids who have no transportation. I have over 100 kids in my league consisting of ten different nationalities, but the majority of the kids are of Hawaiian descent. Sometimes we have up to 30 kids there in one day. I wonder how many of these kids would be on the streets getting into trouble if they didn't have these types of healthy outlets after school and on the weekends. I also coach a women's volleyball group on Mondays for mom's. I currently have 30 mom's signed up. They find babysitters to watch their kids so they can play volleyball once a week. They constantly thank me and tell me how much they need this outlet. They get a break from their kids and have so much fun. There is another group that plays there every Wednesday, and a doubles group that plays there on Tuesday and Saturdays. I also understand that people in the community have played volleyball at this location for over 60 years, if not longer. If you remove the volleyball courts at Keauhou Bay it will create a huge vacuum in the local community and all the kids that have been participating in daily volleyball training and play will have nowhere else to go to play and learn in a safe family atmosphere. Please feel free to call me if you have any questions 808-938-4707. I am hoping and praying that you will reconsider taking down the volleyball court at Keauhou Harbor. It is truly an asset to this community.</p>	<p>Thank you for your letter dated April 11, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We applaud you for your service to the community and helping to improve so many young peoples lives. At present, KS does not have an agreement with any entity for use of the volleyball court. Further complicating the matter, a portion of the land underneath the court is within the County right-of-way and therefore outside of KS ownership. KS is committed to the continued consultation with elected officials and representatives of the Kona area to discuss how outdoor recreational activities such as volleyball can be planned in more appropriate areas.</p> <p>Thank you for your participation in the environmental review process.</p>
Kitty Lani	<p>There is strong opposition to development here!!! Stop please!</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP)</p>

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<b>Comments</b>	<b>Commenter</b>	<b>Responses</b>
		<p>prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new</p>

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Comments	Commenter	Responses
		<p>development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Kristi Kranz</p>	<p>Please do not put another resort at Keahou Bay. The beach is small, it cannot support more tourists, it is already crowded with locals who use this beach to paddle, swim, play volleyball and swim. Please leave us our little slice of paradise, do not build another resort here.</p>	<p>Thank you for your letter dated April 12, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option.</p>

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		<p>Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Leslie Rae</p>	<p>Please put a stop to the development of Keauhou Bay.                      Outrigger hotel which should never have been built on sacred land sits empty.                      Keauhou shopping commercial is vacant.                      This is not necessarily and will do more harm and no good can come of this.</p>	<p>Thank you for your letter dated April 20, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its</p>

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		<p>resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>

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<p>Lew Brentano</p>	<p>I live in the Keauhou Bay area on Monaco Street major concern I want to address is making Keauhou Bay and the surrounding area, especially the side of the bay by the Outrigger Keauhou resort, ADA compliant and s accessible.</p> <p>I am a wheelchair user and applaud the proposed plan for wheelchair accessible path from north of the bay to south of the bay connecting to the road leading to the bay and the Outrigger hotel on the south side of the bay, as there is no safe access right now from north to south.</p> <p>This might be the only good thing about the development plan presented by Kamehameha schools! The proposed commercial and resort development will certainly increase automobile and truck traffic, and decrease the safety for those of us in wheelchairs, or mobility impaired, by increasing the likely hood of car/truck - wheel chair accidents.</p> <p>I urge the County or other government entities with jurisdiction over this plan to reject it.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statues Chapter 343.</p> <p>We acknowledge your concerns related to traffic and safety. Street capacity, traffic circulation, and ADA accessibility were taken into consideration during the development of alternatives. The Project involves multiple design elements to improve overall circulation and alleviate congestion. The Project proposes to improve the Old Kona Road to support multi-model transportation options while also providing an accessible linkage across the two sides of the Bay. The roadway is intended to be pedestrian orientated to serve as a key route for residents and resort guests to access the dining, commercial, and recreational activities throughout the area.</p> <p>The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr &amp; Peers to identify and assess</p>

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Comments	Commenter	Responses
		<p>existing and future mobility option as well as potential traffic impacts generated by the Project (<i>Appendix E</i>).The MAR found that the implementation of the Project would not result in significant traffic impacts.</p> <p>Thank you for your participation in the environmental review process.</p>
Linda Bollingert	I oppose the development at Keauhou Bay. I believe it would be detrimental to the mellow local environment that exists there now.	<p>Thank you for your letter dated April 26, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community</p>

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		<p>members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
Linda Groene	No on redevelopment of Keahou No on 150 condos and blocking access to ocean Save Keauhou. I lived in Kailua Kona for 14 years and shame on those who want to ruin it	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to</p>

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		<p>maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Access to the shoreline will not be impeded by the implementation of</p>

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Comments	Commenter	Responses
		<p>the Project. Improved pedestrian networks and the expansion of open space is expected to have a beneficial impact on access and recreation.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Lisa Bunge</p>	<p>As a nearly 40 year resident of the Big Island I have seen so many changes to this island. Growth is inevitable, but please let's not ruin another special place. Don't succumb to the ridiculous plans that are being made for Keauhou Bay.</p>	<p>Thank you for your letter dated April 12, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option.</p>

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		<p>Guided by KS’ mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the ‘āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Lisa Sterritt</p>	<p>1. Has the traffic impact on Ali'i Drive been studied or considered? Will there be an impact?</p> <p>2. Is there any consideration around the view plan impact for existing communities behind the proposed hotel space? In particular, I am an owner at Keauhou-Akahi Condominiums. Between the hotel and the proposed landscaping, the views of the existing communities will be completely blocked. Is this part of the research?</p>	<p>Thank you for your letter dated April 11, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We understand that parking and circulation has been challenging in residential neighborhoods surrounding Keauhou Bay. Street capacity and traffic circulation was taken into consideration during the development of alternatives. The</p>

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Comments	Commenter	Responses
		<p>Project involves multiple design elements to improve overall circulation and alleviate congestion. The Project proposes to improve the Old Kona Road to support multi-model transportation options while also providing a linkage across the two sides of the Bay. The roadway is intended to be pedestrian orientated to serve as a key walking route for residents and resort guests to access the dining, commercial, and recreational activities throughout the area.</p> <p>The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr &amp; Peers to identify and assess existing and future mobility option as well as potential traffic impacts generated by the Project (<i>Appendix E</i>).The MAR found that the implementation of the Project would not result in significant traffic impacts.</p> <p>As discussed in DEIS Section 4.15, a visual analysis was conducted by G70 to identify potential impacts to known visual corridors and associations within and adjacent to the Project Area. This analysis was</p>

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Comments	Commenter	Responses
		<p>based upon the conceptual layout of all facilities and proposed uses. The bungalow units themselves are designed to nestle into the natural landscape by aligning the structures along the natural sloping topography. Each unit, with a height of approximately 25 feet, is well below the 90-foot height limit allowed under the County zoning code.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Lisa Sterritt</p>	<p>I am a newer owner on the Big Island of Hawai'i and am very concerned about the proposed development at Keauhou Bay by Kamehameha Schools.</p> <p>Having attended the April 11 meeting, and reading the EIS, it is apparent this proposed development will have a negative impact on every community in the area <i>except for KS</i>. This does not align with the spirit of Aloha I have been educated about, and want to respect.</p> <p>I ask that you do all in your power to help our communities stop this development from happening. It does not respect the sacred birthplace and surrounding area, the Bay itself, or the communities that hold this place so dear.</p>	<p>Thank you for your letter dated April 20, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by</p>

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		<p>unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Louis Putzel</p>	<p>I oppose the further development of Keauhou Bay. Enough of the space around it has already been converted to luxury resort space. KS surely has enough money to take better care of the area in the public interest and in the name of conserving Hawaiian cultural heritage without adding more resort accommodations. Efforts should be made to do a better job of taking care of the land behind the Bay, e.g. as a PUBLIC park. ALLOW some small food concessions and shops in the park to generate rental income, something everyone can enjoy. The canoe club is obviously important to the local</p>	<p>Thank you for your letter dated April 21, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>community, so give them more support! Improve the environment so that it is a more socially beneficial space for the public.</p>	<p>We acknowledge your comments related to the boutique resort. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process. The income generated from activities at Keauhou Bay – including the resort – will be used to support KS' mission as well as the educational and cultural components of the Keauhou Bay Management Plan. Thank you for your participation in the environmental review process.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
<p>Marianne Bickett</p>	<p>We have family on Oahu and Big Island and visit often. We love Keauhou Bay and are shocked that you are considering to develop this area. Have we not learned from the past that we must stop the insanity of development for greed and gain when the environment, and ultimately us, suffer?</p> <p>Even though you say you will provide shoreline access, you will destroy the natural beauty of this place. You will negatively impact the ecosystem and this harm is too high a price to pay for your profits.</p> <p>Please reconsider this decision. Please. What kind of a world do you want to leave for YOUR grandchildren? Can you not preserve it and develop elsewhere? We need to shift our thinking from profits/greed/growth to preservation/cooperation/health of ourselves and our planet. Especially today, Earth Day, can you not reconsider?</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient</p>

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		<p>economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Marjorie Bryant</p>	<p>I strongly object to Kamehameha Schools' plans for Keauhou Bay. Kamehameha III's birthplace is not the right place for a new resort, more commercial space, and a new road.</p> <p>Before I begin listing my concerns, I thank you, the authorities of Hawaii County, for listening to them. I realize that, because my Keauhou condo is my vacation home and not my permanent residence, my opinion may not count as much as others. But I intend to make my Keauhou condo my permanent home someday, and this proposed development will impact me greatly.</p> <p>If this planned development goes through, it will negatively impact my viewshed, my quality of life, and the value of my property, which overlooks this site. I will suffer from more traffic noise and toxic exhaust coming in my windows both during construction and after, from years of construction noise and dust, and from a hotter and drier local climate when the applicant removes all vegetation on site and replaces it with acres of asphalt and buildings.</p> <p>Thirteen additional reasons I object to the development of Keauhou Bay:</p> <p>(1) It will further endanger pedestrian safety on already-unsafe Kaleiopapa St. This is because Kaleiopapa has no sidewalk, and its shoulders are only wide enough to accommodate a parked car. And both shoulders are routinely filled with cars – sometimes the entire 1/3 mile up to Ali'i Dr is completely full, both</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. We offer the following responses to your comments.</p> <p>We understand that parking and circulation has been challenging in residential neighborhoods surrounding Keauhou Bay. Street capacity and traffic circulation was taken into consideration during the development of alternatives. The Project involves multiple design elements to improve overall circulation and alleviate congestion. The Project proposes to improve the Old Kona Road to support multi-</p>

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Comments	Commenter	Responses
	<p>sides. This is especially acute on Wednesday market days, and at night, when manta tours operate. Because the shoulders are filled, folks walk on the road with the traffic – with the trucks towing boats and SUVs and cars and semis speeding up and down the hill (trucks and other lifted vehicles race over the speed humps and do not slow). In the daylight, this is hazardous. In the dark, for manta customers walking on the road, often til midnight and beyond, it is treacherous. No amount of parking in the space available will accommodate the additional traffic this development will bring, let alone the existing traffic. Plus, the tour operators currently operating roadside on Kaleiopapa: they aren't going to lease commercial space. Why would they, when they can operate roadside for free? So, for these reasons, the roadsides will stay crowded, despite the parking lots proposed. And pedestrians will continue to have to walk in the roadway with the traffic – way more traffic than now. Adding years of construction vehicles to this mix is only going to make it even more treacherous. People are going to get hurt or die. And, when that happens, they will sue Hawaii County for allowing this unsafe situation to exist on its road.</p> <p>(2) This development will increase traffic by hundreds of cars/day on our already clogged local roads and highways. Kailua-Kona does not need more traffic.</p> <p>(3) Kailua-Kona, and Keauhou in particular, does not need more tourist accommodations. Kailua-Kona is jammed to capacity with tourists as-is. What Kailua-Kona needs is more affordable housing, so the jobs created by its already thriving tourist industry can be filled.</p> <p>(4) This development will take a green, lush area of trees and shrubs and flowers, and replace it with pavement and buildings, permanently and negatively altering the gorgeous scenery along Keauhou Bay, as viewed from both the water and the land.</p> <p>(5) Removing the vegetation from this extensive area will also make the area hotter and less likely to attract replenishing rain. Which will over time dry up natural springs in the area. Scientific studies have proven that trees bring rainfall. And pavement and hardscape raise temperatures.</p>	<p>model transportation options while also providing a linkage across the two sides of the Bay. The roadway is intended to be pedestrian orientated to serve as a key walking route for residents and resort guests to access the dining, commercial, and recreational activities throughout the area.</p> <p>The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr &amp; Peers to identify and assess existing and future mobility option as well as potential traffic impacts generated by the Project (<i>Appendix E</i>).The MAR found that the implementation of the Project would not result in significant traffic impacts.</p> <p>The provision of housing on the KS owned lands at Keauhou Bay was considered as an alternative and discussed in DEIS Section 6.3. Based on the analysis of alternatives, the Housing Alternative would fail to meet the objectives of the Project. Under this scenario, the KS lands would improve income generation opportunities to support area programming, however, a</p>

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	<p>(6) This development will burden the local water supply during our era of unremitting drought and increasing fires.</p> <p>(7) This development will create significant extra energy demand on an island that is completely reliant on imported oil for its electricity – during a worldwide oil shortage that has already driven up electric bills here.</p> <p>(8) This development will cause light pollution in an area treasured for its dark skies.</p> <p>(9) This applicant has already demonstrated that it is no longer interested in being a good neighbor. In Feb and March of this year, the applicant took steps to block public access to the shoreline at H Bay (which in their Keauhou Management Plan they call Pebble Beach). H Bay is shoreline public access, and its shoreline is a longstanding local surfing and fishing spot. Neighbors, with the applicant's explicit written permission, had been maintaining the grounds of H Bay and had restored its endangered pond. They were summarily told to cease. At the same time, the longstanding path along the shore was covered with rocks, and a "no trespassing under threat of prosecution" sign placed along the shore.</p> <p>(10) The applicant doesn't listen and respond kindly to community concerns, as evidenced by the April 11, 2022, meeting, which I attended. There, the applicant summarily dismissed volleyball players' and neighbors' concerns. And summarily dismissed Native Hawaiians' concerns. The applicant did not post on its website its slides from the meeting – as promised in the meeting. And the applicant never invited neighbors to participate in its planning process ahead of the meeting – only special interest groups.</p> <p>(11) The applicant is not being forthright; they are not publicizing pertinent information about their plans, nor are they directing public comments to the Hawaii County Planning Department. It is my understanding that the EIS process, and the permitting process for such projects as this, require the applicant to provide the public – especially project neighbors – with a county planning email address, so project neighbors and interested members of the public may comment on the project to the appropriate governing body during appropriate time periods. In its notice to neighbors that I received, no such email address was provided. Only the applicant's email address and their</p>	<p>residential development may result in adverse impacts to the surrounding environment, particularly with regards to view planes, infrastructure, traffic, recreational activities, and open space. Additionally, the provision of housing would not be cost effective for KS to develop at this location and could be cost prohibitive for local buyers.</p> <p>As discussed in DEIS Section 4.15, a visual analysis was conducted by G70 to identify potential impacts to known visual corridors and associations within and adjacent to the Project Area. This analysis was based upon the conceptual layout of all facilities and proposed uses. The bungalow units themselves are designed to nestle into the natural landscape by aligning the structures along the natural sloping topography. Each unit, with a height of approximately 25 feet, is well below the 90-foot height limit allowed under the County zoning code.</p> <p>Section 4.12.1 of the Draft Environment Impact Statement (DEIS) provides detailed estimates of the average daily water demand for the various project components.</p>

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	<p>developer's email address were provided. And no such county planning email address is provided on the applicant's website for this project. What's more, the applicant's notice to me contained no specifics on the extent of this development. And the applicant's publicly available maps continue to show no specifics for this development – even though the applicant already has very specific plans they unveiled in the April 22 meeting. Anyone who missed the April 22 meeting has no idea how dense and disruptive the applicant's development plans are.</p> <p>(12) This applicant claims its project will create jobs, but where will its employees come from, when local businesses like KTA Keauhou, Longs Keauhou, Aloha Gas Keauhou, Subway Keauhou, Kenichi restaurant, etc. are all understaffed, trying to hire – even offering hiring bonuses – but still can't find enough employees? Who can afford to live locally and work on a hotel housekeeper's salary?</p> <p>(13) And lastly, but most importantly, I believe that building a hotel, commercial space, and a new road is not preserving Kamehameha III's birthplace, but destroying it.</p> <p>I am not sending this letter to the applicant, Kamehameha Schools, on purpose. They have demonstrated to me that they do not genuinely care about anything anyone has to say. Sharing my views with them is pointless. They are not listening. I am sending this letter to you, Alex Roy and Rebecca Villegas, because I know it is your job to care about the county's environment and people and fairly administer the laws of the land, so that the people's voice may be heard, and not just powerful, rich organizations like Kamehameha Schools.</p>	<p>In total, the Project will result in an average water demand of approximately 97,466.2 GPD. Based on these estimates, impacts to the public water supply are not expected.</p> <p>DEIS Section 4.12.4 provides a detailed description of the Projects estimated energy demand. The total electrical demand for the Project is anticipated to be 3,181.86 kiloVolt Amperes (kVA). Provisions of additional electrical services are not expected to effect existing utility services in the greater Kailua-Kona Region.</p> <p>The Project includes several components aiming to conserve overall energy usage and will strive to meet a LEED silver minimum. The Project will also be implementing elements from the USEPA Energy Star Program such as efficient insulation, high performance windows, compact construction, efficient ventilation systems, or energy saving lighting and appliances.</p> <p>Various areas throughout the Project Area will be equipped with new lighting to improve nighttime safety and security. The Old Kona Road and associated walking paths</p>

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		<p>will be equipped with appropriate lighting. As of June 2021, the Hawai'i County Street Light Standards has a list of approved Light Emitting Diode (LED) roadway luminaires that are acceptable for installation within Hawai'i County. Roadway lighting system will be energized through metered electrical connections to HELCO secondary power sources situated along Old Kona Road. All roadway lighting will consist of fully shielded light fixtures and comply with Hawai'i's Outdoor Lighting Ordinances and Dark-Sky regulations.</p> <p>Consultation with community groups and stakeholders has been ongoing since 2016. KS takes the concerns of its neighbors seriously. Input from community has guided this planning process from the beginning and will continue to do so throughout the HRS 343 Environmental Review Process. A recording of the EISPN scoping meeting was posted to the Project Website for participants to view following the meeting.</p> <p>DEIS Section 4.14 assess economic impacts of the Project. An Economic Impact Report (EIR) was prepared</p>

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		<p>by Environment &amp; Economics for the Project and included in <i>Appendix G</i>. The EIR estimates that there would be an estimated total of 159 jobs generated or sustained from Project operations annually. These jobs would primarily be in service industries such as the hotel industry (e.g., building maintenance and clerks), retail industry (e.g., retail sales), and restaurant industry (e.g., food and beverage service and cooks). Employment opportunities within the Project Area will continue to diversify and increase employment opportunities in the Kailua-Kona Region.</p> <p>DEIS Section 4.1 discusses cultural, archaeological, and historic resources within the Project Area. The KBMP proposes to establish a new cultural heritage corridor with the aim to preserve and protect the most culturally significant and vulnerable sites while enhancing opportunities for the public to engage and learn about their importance. Implementation of the Project is anticipated to generate long-term benefits by preserving sensitive archaeological sites and implementing a plan to steward the sites in perpetuity.</p>

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		Thank you for your participation in the environmental review process.
Marta Barraras	Please do not build again at the culturally historic areas in Keauhou! Our island of Hawaii Needs to be a model of harmony and Malama of the land.	Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.  We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed

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		<p>to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
Martha Denney	<p>The southern part of the community is in need of a safe place for keiki and kupuna to swim in the ocean with a sloped sand entrance. There is virtually no place to go for that except Keahou bay, but you are endangered by the boats and traffic. This use is consistent with the traditional use of the ocean for teaching swimming. It could be part of a larger community park that would include a place to shore fish.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>The KBMP proposes to create a mauka / makai corridor to improve public shoreline access and to enhance the area for educational, recreational, and cultural activities. Draft Environmental Impact Statement (DEIS) Section 3.2.3 describes the Project's aim to visually and spatially consolidate the mauka and makai recreation areas to create an expanded</p>

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Comments	Commenter	Responses
		<p>shoreline park. Implementation of the plan is expected to enhance opportunities for ocean recreation and cultural use of the shoreline.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Megan Spelman</p>	<p>Aloha to county planners and developers,</p> <p>Our family has owned a home on Manukai Street near Keauhou Bay for nearly 30 years. It breaks our heart to think of another resort developed above Keauhou Bay. The bay and neighborhood can hardly manage the amount of visitors and locals using the bay as is. Please no more development! I think we should concentrate on management and letting commercial spaces open in current buildings. Through traffic to the bay via Kam III would ruin our quiet neighborhood we all treasure. Please NO MORE DEVELOPMENT at Keauhou Bay. We already have a huge resort and many commercial businesses running out of the bay. We can't handle more. Kamehameha School will have to find another income generator on their many properties. I am sure there are options. Keauhou Bay can't manage another resort! We don't need it or want it.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision,</p>

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		<p>the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the ‘āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Meredith Stapp Ozbil</p>	<p>I am writing to you as I am a user of Keaukou Bay, a paddler and member of KCC, a resident of Kailua-Kona and a constituent and I oppose the redevelopment project.</p> <p>1st, does the region need more Boutique Hotels? Waikoloa Resort was just approved in adding a vast number of vacation accommodations (with Zero much needed affordable housing.) Do we need more? The Earth is already in a climate crisis. Are vacancy rates at an all time low? Are we as a community taking car of what we already have?</p> <p>Second, Kamehameha Schools does not have the greatest reputation in completing projects. Per their own website the redevelopment at Kahalu'u Ma Kai has been in "final stages" since September 2020. It is still incomplete. The construcion fencing and incomplete projects are becoming an eyesore.</p> <p>Furthermore, at that same Kahalu'u site they already demo'd a hotel. Apparently to honor the cultural footprint in that location and mitigate</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statues Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand</p>

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	<p>financial risk of rehabilitation. One could easily argue the cultural footprint at Keauhou's is far greater. And I am not sure how a Boutique Hotel would have less financial risk in 40 years (approx. age of the Keauhou Beach Hotel when demolished) at a time when it would also need rehabilitation. Hotels are not commodities to be thrown away in a landfill creating huge environmental waste on a small island.</p> <p>It leaves me questioning:</p> <p>Is the construction and demolition and long term maintenance of buildings owned and managed by Kamehameha Schools at the whim of whom ever is on the board at the time?</p> <p>Are they maintaining thier buildings or deferring maintenance until the buildings cease to make money and are too expensive to rehabilitate? Is that something an Island community can afford to perpetuate?</p> <p>There are already 2 derelict hotels in Downtown Kona (Kona Inn and Uncle Billy) in the future Do we need another? There are already 2 roped off, fenced in parks and cultural sites that are incomplete, overgrown, littered, and unused (Kahalu'u Ma Kai and La'aloa) Do we need more incomplete projects lingering indefinitely?</p>	<p>and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>The former Keauhou Beach Hotel (Kahaluu Ma Kai) is a different site. There are educational opportunities that KS wants to take advantage of that were not conducive with the</p>

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Comments	Commenter	Responses
		<p>previous hotel structure. The income generated from activities at Keauhou Bay will be used to support KS' mission as well as the educational and cultural components of the Keauhou Bay Management Plan.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Michael Herbert</p>	<p>My name is Michael Herbert and I live in the Keauhou makai area with my wife and our two children. My wife and I have owned a home in Keauhou since 2004. We were married at the Keauhou hotel (when it was the Sheraton) in 2009. We are raising our two young children here in Keauhou, and our family benefits daily from the many special features of this place. I am very happy to see that Kamehameha Schools (KS) is looking at ways to restore cultural sites in this very special area and reverse some of the land use planning decisions of the past that are not consistent with the rich cultural heritage of the area. I have some suggestions that I think would improve on the current plan and better balance the proposed restoration and development activities. I respectfully encourage KS to consider these ideas and incorporate them into the next stage of your planning work:</p> <p>From North to South, I suggest:</p> <p><b>1. Restore and rebuild the holua (North).</b></p> <p>We often walk with our children and point out to them the magnificent Royal Holua. I cannot help but imagine the intense speeds obtained descending the slide and admire the bravery of those who participated in the sport. Equally impressive is the amount of resource and social coordination needed by the Hawaiian community here at Keauhou to build the slide.</p> <p>The Royal Holua should be restored as completely as possible, and should once again be a place for people to practice the sport and for spectators to enjoy it. The proposed redevelopment of this area presents a once-in-a-generation opportunity to make bold moves to reclaim this magnificent</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We appreciate your suggestions to restore the hōlua slide. Although there is no extant remains of the hōlua slide in the Project Area, the development footprint was designed to preserve the alignment of the original corridor for open space and preservation in the future. The concept behind this area is to create a physical and visual memorial to Hōlua o Kāneaka, the monumental stone slide requisitioned by Kamehameha I at the time of the birth of his son, Kauikeaouli. Interpretive signage will be included to tell the story of the hōlua and other stories. KS will</p>

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	<p>feature and revive traditions surrounding holua sled racing. Keauhou Bay could become the epicenter for the revival of the Holua. I urge KS to take advantage of the opportunity and act more fully on the vision to restore this area by bringing back the Royal Holua.</p> <p><b>2. Restore the birthplace of Kauikeaouli/Kamehameha III (Bayfront).</b></p> <p>The map excerpts and comments below are taken from Henry E.P. Kekahuna’s masterful maps of Keauhou Bay from 1949 - 1955. Kekahuna’s detailed renderings show how the birthplace used to look and his historical comments directly tie to the birth story of Kauikeaouli/Kamehameha III. Preserving his birth story was undoubtedly a strong motivation for the creation of these maps.</p> <p>Existing commercial development has paved over and covered up many remarkable features of the area. In addition to realigning the access and relocating the commercial business, I urge KS to remove the pavement and uncover the springs and birthing pool shown on the maps so that the fuller story of the birth of Kauikeaouli/Kamehameha III can be seen and appreciated, and the area stewarded in ways more fitting for such an important leader in Hawaiian history and culture. Interpretive signage would be beneficial in educating visitors to be respectful of this sacred birthplace.</p> <p>Links to KeKahuna’s Maps:  <a href="http://data.bishopmuseum.org/Kekahuna/kekahuna.php?b=closeup&amp;ID=15">hBp://data.bishopmuseum.org/Kekahuna/kekahuna.php?b=closeup&amp;ID=15</a>  <a href="http://data.bishopmuseum.org/Kekahuna/kekahuna.php?b=closeup&amp;ID=14">hBp://data.bishopmuseum.org/Kekahuna/kekahuna.php?b=closeup&amp;ID=14</a></p> <p><b>3. Focus commercial development activity on the South end of Keauhou Bay and above the cliffs. Do not include commercial activity on the North end of Keauhou Bay (South).</b></p> <p>To maximize enjoyment of the north and bayfront proposed open spaces by visitors, residents, and cultural practitioners, I strongly urge KS to consolidate the development to one area on the south side of the bay so that cars, parking, boats and commercial activity is concentrated in the area near the current Outrigger Resort and where the newer commercial harbor activities will be relocated. Doing so would create an experience where the north end of the bay, near the proposed redeveloped Royal Holua and over to the birthplace</p>	<p>also seek collaboration with community partners interested in the restoration and utilization of the corridor to reinvigorate Keauhou as an epicenter for hōlua.</p> <p>DEIS Chapter 3 provides a detailed description of the Project inclusive of restoration activities of Ho’okūkū Pond. As part of the improvements in the heritage corridor, the Project will expand the remnant anchialine pond and restore ecological systems within Ho’okūkū Pond to enhance conditions for native species to thrive. DEIS Section 4.5 describes potential impacts and mitigation measures to protect surface water at the Project Area.</p> <p>DEIS Chapter 3 also provides a detailed description of the proposed commercial spaces and boutique resort. The boutique resort will be located above ‘Ahu’ula Cliff. The area below the cliff is proposed for preservation as a heritage corridor. The new commercial facilities will be located south of the bayfront on the northwest corner of Kaleiopapa Street and Ehukai Street.</p> <p>We understand that parking and circulation has been challenging in areas surrounding Keauhou Bay. Street capacity and traffic</p>

**Table 7.2 DEA Summary of Comments and Responses**

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	<p>can serve as quieter, pedestrian friendly shoreline access, restored cultural sites, and quieter recrea.on including the canoe club. On the south end near the existing hotel is where any commercial development, new roadways, and new parking should be concentrated.</p> <p>Do not make the old road a thoroughfare. Extend it from the south side of the bay just as far as is needed to serve the development above the cliffs and no farther. Land use on the north end of Keauhou Bay should be focused on the physical and cultural revival of the Royal Holua.</p> <p>I strongly encourage KS to include in any proposed new commercial or hotel development a more contemporary mixed use approach, with retail on the ground floor, including holua sled builder and shop, surf/paddleboard shop with rentals, places for classes and educa.on, and tour operators on the ground floor so that guests can conveniently book activities. Throw in a couple of restaurants serving locally grown food, as well.</p> <p>I'd also strongly encourage KS to include a mix of high end and affordable residential units with any planned boutique hotel. These units could function as permanent rental units that generate revenue for KS, but also allow for the bayfront not to become dominated with visitors. Ideally, more affordable rental units could be mixed in as well, allowing local families an opportunity to live at Keauhou Bay.</p> <p>Many visitors have moved beyond the mindset when resorts nodes were developed to exclude local people; these visitors seek enriching social experiences that, while comfortable, allow an opportunity to interact with locals and feel a part of the community during their stay. The new development should reflect that evolution in the visitor industry. Similarly, most local residents are tired of being priced out of areas that are special for all of us. Local families deserve opportunities to live where they want to. KS has truly remarkable resources and the ability to realize an inclusive and transformative vision for this place.</p> <p>I would be happy to talk further with KS about any of these ideas. I plan to stay in this area and want to help make it the best it can be for present and</p>	<p>circulation was taken into consideration during the development of alternatives. The Project involves multiple design elements to improve overall circulation and alleviate congestion. The Project proposes to improve the Old Kona Road to support multi-model transportation options while also providing a linkage across the two sides of the Bay. The roadway is intended to be pedestrian orientated to serve as a key walking route for residents and resort guests to access the dining, commercial, and recreational activities throughout the area.</p> <p>The provision of housing on the KS owned lands at Keauhou Bay was considered as an alternative and discussed in DEIS Section 6.3. Based on the analysis of alternatives, the Housing Alternative would fail to meet the objectives of the Project. Under this scenario, the KS lands would improve income generation opportunities to support area programming, however, a residential development may result in adverse impacts to the surrounding environment, particularly with regards to view planes, infrastructure, traffic,</p>

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	<p>future generations. The land and waters of Keauhou Bay have a powerful story to tell; let the story be told.</p>	<p>recreational activities, and open space. Additionally, the provision of housing would not be cost effective for KS to develop at this location and could be cost prohibitive for local buyers.</p> <p>This Project aims to purposefully pursue the ‘Āina Aloha Economic Futures Declaration with a specific focus to “assert collective kuleana to restore degraded environments, sustainably managed human-occupied spaces, and protect the vibrancy of intact ecosystems.”</p> <p>However, KS further acknowledges that one aspect of Project will require an innovative approach to redefine the role of ho’okipa (to welcome others with hospitality) in the region. The development will strive to be a destination where both local residents and visitors alike will feel welcome.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Mike Morgan</p>	<p>Im writing in strong objection to the proposed development of Keauhou. Over the last 20 years I have enjoyed the bay and pier as a place of natural and cultural beauty. It invokes what Hawaii is, and should be. The calm and quiet of the bay is a true gift to Big Island.</p> <p>Over the last 5 years Ive seen the mismanagement of the bay and resources decline. There is no longer a trash can by the beach park, the benches on the historic walking path are rotten with metal spikes sticking out of them. If the</p>	<p>Thank you for your letter dated March 30, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai‘i Revised Statues Chapter 343.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>management of the bay is in this state now why would we open the space for 150 visitors to tread upon? Its shameful.</p> <p>The Historic Alii drive district sits derelict and vacant. We do not need anymore retail space, and certainly not anymore hotel rooms by the Sheraton (Outrigger).</p> <p>Please don't allow this</p>	<p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational</p>

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Comments	Commenter	Responses
		<p>values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Milton and Christina Mendes</p>	<p>We are writing to express our concern regarding the proposed hotel and commercial development at Keauhou Bay. This historic area should be preserved for posterity and the quiet enjoyment of current residents.</p> <p>Let's focus on improving the existing infrastructure and partially completed projects that already exist in Kona.</p> <p>The bay is one place that can still be enjoyed by local families. Please don't ruin it for the profit of a few.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a</p>

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		<p>strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Nancy Lorenzo</p>	<p>Hello, I am a homeowner and registered voter in Kailua Kona.</p> <p>The projected developments will increase the damage to our Bay and the environment of our ocean and Island, further. Eroding the beauty of our island and the home of so much wildlife. Please place the value of our island home over the profit of corporations.</p> <p>Please consider the gravity and permanence of this situation before it is too late!</p>	<p>Thank you for your letter dated April 21, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which</p>

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Comments	Commenter	Responses
		<p>leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
Nancy Sakamoto	<p>I write this letter in support of the Keauhou Bay Management Plan. I have been a resident of Kailua-Kona, Hawaii since November 1963 and my father had a boat dock at Keauhou Bay. That has been long gone years ago.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP)</p>

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	<p>I admired the insight to move the commercial activities out of the bay and over to a new section to ease both the traffic, while enhancing the historic and cultural value of the deep Hawaiian Culture that has long been missing in the bay over time. To bring these historic sites, such as the Holua Slide, the Kamehameha Birthplace marker and Mo`ikeha Cave, and Ka`Ili`ilinehe Park as preserved points of interest is much needed. These treasured places must be saved and revered.</p> <p>I fully support the efforts and insight that Kamehameha Schools is taking in the very well thought out plan for Keauhou Bay.</p>	<p>prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We greatly appreciate your support for the Project. DEIS Section 4.1 discusses cultural, archaeological, and historic resources within the Project Area. The KBMP proposes to establish a new cultural heritage corridor with the aim to preserve and protect the most culturally significant and vulnerable sites while enhancing opportunities for the public to engage and learn about their importance.</p> <p>Implementation of the Project is anticipated to generate long-term benefits by preserving sensitive archaeological sites and implementing a plan to steward the sites in perpetuity.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Nicole Cipriani</p>	<p>This email serves as a plea to thoroughly consider the devastation, environmental impact, marine life habitat and sacredness of our beautiful Keauhou Bay and surrounding areas that are being proposed for building. Let the land rest here! This is a sacred area with not only native historical ties, but environmental impact in many areas.</p> <p>Do not let greed, power and money continue to consume our island and especially Keauhou Bay!! Enough is enough.</p> <p>Condos, commercialism, lights, chemically ridden landscaping, in and out tourists who do not protect the lands or the ocean will continuously use this</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at</p>

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	<p>sacred area as a play ground for their benefit and the developers are continuing to think only of profits and greed.</p> <p>When are we going to stand up to the continued raping and pillaging of sacred lands all for the almighty dollar??? When???</p> <p>Who are these projects helping and whose pockets are they lining???</p> <p>Please, there are vacant and run down areas that already exist that need assistance in redevelopment. Concentrate on getting those back to where they need to be.</p> <p>Leave Keauhou Bay alone!</p> <p>Please vote with the people that live, work and strive so hard to care for the 'aina here, not the developers that only want to take with promises of jobs.</p> <p>Please say NO to developing Keauhou Bay! Let's concentrate on cleaning it up, not developing to make it worse. Fix the bathrooms, get new picnic tables, create a family friendly space, not building more condos and retail space! Not necessary!</p> <p>Concentrate on building housing for the many locals that have nowhere to live, not build overpriced condos for mainland residents and AirBNB to gain profits from. Enough is enough!!!</p> <p>Please vote NO to Keauhou Bay development!!!</p> <p>Thank you for your urgent attention to this devastating matter.</p>	<p>Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p>

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Comments	Commenter	Responses
		Thank you for your participation in the environmental review process.
Olivia Pasciuta	<p>My name is Olivia Pasciuta. I am a lineal descendant of Ha'anio and Kaiaieke; who lived in Keauhou Bay from the 1800's.</p> <p>I am opposed to the planned development.</p> <p>Considering the wealth of Kamehameha in general, so much more could be done and has yet to be done for the future generations of not only Hawaiian children; but the community as a whole.</p> <p>If you are willing and plan to have a public hearing, I hope that you will send me information on attending that public meeting.</p>	<p>Thank you for your letter dated April 16, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed</p>

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		<p>to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Pamela Myers</p>	<p>I just read through some of the above plan and was astounded and appalled! I am a member of Keauhou Canoe Club and spend a considerable amount of time in the area. The area is lovely, not congested, and the current amount of development seem quite appropriate for the size of the bay and neighborhood.</p> <p>The proposal even says that the bay is highly used by visitor and commercial groups. The above proposal would mean MORE USE! I thought that Kamehameha Schools is supposed to PROTECT not destroy their land. With guise of an education center this proposal is WAY TO LARGE AND INAPPROPRIATE FOR THIS SPECIAL HISTORIC AREA.</p> <p>If I lived in that neighborhood I would be up in arms as this will create a completely different environment. I truly hope this DOES NOT GO THROUGH. It definitely sounds like KS has sold out for money!</p> <p>I am completely opposed to this as written. A small cultural center would be fine. But not this monstrosity!</p>	<p>Thank you for your letter dated April 13, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the</p>

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		<p>bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
Pat Eskenazi	I oppose possible changes to the beautiful Keauhou Bay.	Thank you for your letter dated April 21, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP)

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		<p>prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new</p>

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Comments	Commenter	Responses
		<p>development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Patrick Badley</p>	<p>I have reviewed the Keauhou plans for the future and consider them absurd. Let's remember 5 years ago when DLNR proposed 8 new mooring balls for the bay. They completed a \$100,000 Environmental review and found no impact. That's when things went crazy...</p> <p>In the public hearing we heard at least 50 people say:</p> <ol style="list-style-type: none"> <li>1. the bay is already too crowded with boats, kayaks, swimmers, snorkelers, and outrigger canoes from the Keauhou Canoe Club</li> <li>2. Parking areas are full now and there is no more availability in the area</li> <li>3. The local natural resources are sensitive and will be damaged</li> <li>4. The local historical resources will be affected, damaged, and insulted</li> <li>5. Keauhou Bay is a historical monument to Hawaiian history - why add restaurants, condos, kiosks, shopping, and hundreds of tourists?</li> <li>6. Traffic in the area is bad now. At night with manta ray tourists it is even worse. DLNR is adding more manta viewing mooring balls and traffic and parking will be worse.</li> </ol> <p>If adding a few mooring balls to the Bay was rejected, then this massive project idea should be rejected. The whole idea makes no sense and will destroy Keauhou Bay as we know it. Why keep adding tourist areas?</p>	<p>Thank you for your letter dated April 4, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option.</p>

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<b>Comments</b>	<b>Commenter</b>	<b>Responses</b>
		<p>Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>We understand that parking and circulation has been challenging in residential neighborhoods surrounding Keauhou Bay. Street capacity and traffic circulation was taken into consideration during the development of alternatives. The Project involves multiple design elements to improve overall circulation and alleviate congestion. The Project proposes to improve the Old Kona Road to support multi-model transportation options while also providing a linkage across the two sides of the Bay. The roadway is intended to be pedestrian</p>

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Comments	Commenter	Responses
		<p>orientated to serve as a key walking route for residents and resort guests to access the dining, commercial, and recreational activities throughout the area.</p> <p>The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr &amp; Peers to identify and assess existing and future mobility option as well as potential traffic impacts generated by the Project (<i>Appendix E</i>).The MAR found that the implementation of the Project would not result in significant traffic impacts.</p> <p>A Natural Resource Assessment was conducted for the Draft EIS (DEIS) by AECOS (<i>Appendix C</i>). Please refer to Section 4.6 of the DEIS for discussion of native species, endangered species, and critical habitat in relation to the KBMP. The Project Area has been heavily infiltrated by non-native and invasive species. As discussed in the Natural Resource Assessment, no species listed as threatened or endangered by state or federal statutes were identified on any of the project parcels at Keauhou Bay.</p>

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Comments	Commenter	Responses
		<p>The potential exists that several listed species might transit or utilize the general area on occasion. Please refer to DEIS 4.6 for measures to mitigate potential impacts to natural resources.</p> <p>DEIS Section 4.1 discusses cultural, archaeological, and historic resources within the Project Area. The KBMP proposes to establish a new cultural heritage corridor with the aim to preserve and protect the most culturally significant and vulnerable sites while enhancing opportunities for the public to engage and learn about their importance. Implementation of the Project is anticipated to generate long-term benefits by preserving sensitive archaeological sites and implementing a plan to steward the sites in perpetuity.</p> <p>Thank you for your participation in the environmental review process.</p>
Paul Catanzaro	<p>I've lived in this area for 38 years and watched hotels being torn down to uncover the mistakes of the past. I've been to meetings years ago when it was always mentioned that KS was trying to bring back the history of this area That had been destroyed. It would be a shame if someday Another generation realized that what you built and designed also Needed to be torn down . There has to be a way to plan and design something that could complement the original history of this area. it would be great if this planning could be</p>	<p>Thank you for your letter dated April 20, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p>

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	<p>done in prayer and ask the Lord what he thinks is best for this area, I'm sure he will show you.</p>	<p>As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational</p>

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		<p>values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Paul Dagdag</p>	<p>I am a 30+ resident of Keauhou/Kealakekua ahupua'a - I have witnessed the influx of traffic from both locals and tourists in the area. Adding another resort would create more congestion. I oppose the development.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a</p>

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		<p>strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>We understand that parking and circulation has been challenging in residential neighborhoods surrounding Keauhou Bay. Street capacity and traffic circulation was taken into consideration during the development of alternatives. The Project involves multiple design elements to improve overall circulation and alleviate congestion. The Project proposes to improve the Old Kona Road to support multi-model transportation options while also providing a linkage across the two sides of the Bay. The roadway is intended to be pedestrian orientated to serve as a key walking route for residents and resort guests to access the dining,</p>

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		<p>commercial, and recreational activities throughout the area.</p> <p>The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr &amp; Peers to identify and assess existing and future mobility option as well as potential traffic impacts generated by the Project (<i>Appendix E</i>).The MAR found that the implementation of the Project would not result in significant traffic impacts.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Paul Gutekanst</p>	<p>I just read in the paper about Kamehameha Schools proposal for a "boutique resort" at Keauhou Bay. The description was somewhat alarming- 150units? Relocation of existing commercial entities? This is not a good fit for Keauhou- a very special place indeed. This proposal will radically change it's character forever. I'm sure Kamehameha Schools has plenty of other properties it could build on. Let's get them to focus elsewhere.</p>	<p>Thank you for your letter dated April 3, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand</p>

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		<p>and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
Peter and Deborah Siefert	Thank you for informing us of your plans via mail, website and zoom meeting. In general, as others, we don't approve of such massive change to the area adjacent to Keanhou Bay. Environmentally it is not a sound plan and we	Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement

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	<p>don't see any cultural improvements justifying such environmental degradation. Most specifically, we're writing because, if approved, the increased traffic from this project only exacerbates the health and safety issues we are facing from the insufficiently mitigated "bypass", now called "Alii Highway" and it's effect on our complex.</p> <p>We live on the third floor of southeast corner of the building closest to Alii Dr. (Bldg.2) at the Keauhou Akahi. Since the bypass was opened the county has consistently removed the hedge/vegetation that was previously maintained to the guardrail which is exposing us and other residents to vehicular exhaust, noise and road dirt and added access to our property.</p> <p>1). If functional vegetation cannot be maintained as a barrier here with assistance from the county, a functional wall will be needed for mitigation purposes</p> <p>The speeding along this section of Alii Dr./Hwy makes it extremely dangerous to enter Alii Dr. from our complex.</p> <p>2). At the least, the speed limit along this section needs to be reduced and enforced.</p> <p>The corners of Alii Dr./Hwy and Kaleiopapa are not curbed. There are a lot of pedestrians using these corner.s. Cars and vehicles with boat trailers cut the corner and pedestrians waiting at the crosswalk or turning the corner are in danger of being injured. The speed limit goes from 35 to 25.</p> <p>3). The west sides of Kaleiopapa and Alii need to be curbed. And the speed limit needs to be reduced on Alii.</p> <p>4). If the old road below the golf course is to be used as a through road, it needs to be open to the public....including vehicles with boat trailers coming from the trailer storage to the boat ramp....not just hotel patrons.</p> <p>Thanks for the opportunity to comment.</p>	<p>Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to</p>

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		<p>achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>We understand that parking and circulation has been challenging in residential neighborhoods surrounding Keauhou Bay. Street capacity and traffic circulation was taken into consideration during the development of alternatives. The Project involves multiple design elements to improve overall circulation and alleviate congestion. The Project proposes to improve the Old Kona Road to support multi-modal transportation options while also providing a linkage across the two sides of the Bay. The roadway is intended to be pedestrian orientated to serve as a key walking route for residents and resort guests to access the dining, commercial, and recreational activities throughout the area.</p> <p>The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr</p>

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		<p>&amp; Peers to identify and assess existing and future mobility option as well as potential traffic impacts generated by the Project (<i>Appendix E</i>).The MAR found that the implementation of the Project would not result in significant traffic impacts.</p> <p>We understand your concerns related to speed and safety along roadways within the vicinity of the Project Area. As these roadways are under the jurisdiction of the County, KS does not have the authority to install traffic calming devices or other speed controls.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Peter Matlock</p>	<p>I thoroughly applaud the educational mission of Kamehameha Schools, and its concern to bring appropriate respect to the birthplace of Kamehemeha III. That said, the proposed plan for Keauhou Bay is not appropriate.</p> <p>A stated and major rationale for the plan is to increase access to the Bay for kupu'aina and kama'aina. In fact, the plan will do the exact opposite.</p> <p>Building approximately 150 bungalow-style hotel units, adding a 3,000 square foot "fine dining" restaurant, and increasing commercial outlets will crowd out and drive away the very people those promoting this plan say they want to help.</p> <p>Keauhou Bay is used daily by a wide range of people, including many from the lower-income end of the economic spectrum, and many, many locals—from keiki to kupuna. The proposed plan will prevent them from enjoying this treasured local resource, as the area will be flooded with tourists.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its</p>

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	<p>Please don't take it away.</p> <p>Or, as was succinctly stated in the recent zoom meeting, "I don't want to live in another Waikoloa".</p> <p>Please maintain the historical and cultural sense of place that is Keauhou Bay. A new hotel and commercial development is antithetical to that objective.</p>	<p>resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>

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Radine	<p>PLEASE do not ruin this favourite locals bay. it is already crowed and no parking a lot of the time. it is used for snorkelling and scuba diving. Adding commercial and short term rental facilities will have a tremendous negative effect. WE do not want to compete with Maui and become so over crowded that people that live on the island will lose even more of the Aloha we so treasure.</p> <p>PLEASE DO NOT APPROVE THIS DEVELOPMENT!</p>	<p>Thank you for your letter dated April 26, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statues Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient</p>

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		<p>economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
Randee Golden	<p>Wake up please. No boutique hotel in Keauhou bay. Have you been there? Do you recognize the site as being something appropriate to preserve as it is? It is already overbuilt there. PLEASE care for the land you are supposed to protect.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the boutique resort. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to</p>

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		<p>achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process. The income generated from activities at Keauhou Bay – including the resort – will be used to support KS' mission as well as the educational and cultural components of the Keauhou Bay Management Plan.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Rebecca Melendez</p>	<p>I was the first to speak at your zoom meeting. Thank you for hearing the community.</p> <p>I wrote a letter to West Hawaii Today sharing my and others' views from the zoom meeting on keeping Keauhou Bay from becoming a crowded resort.</p> <p>I am also the one who put up the petition titled Save Keauhou Bay from Becoming a Crowded Resort. I'm sure you have received my petitions emails that, as of 3:25 pm, has 1,681 signatures on this petition. This petition has only been up for 8 days. I'm sure there will be more signatures added to it going forward.</p> <p>I know you are just doing your job to help improve The Big Island. Please, you must be aware that this bay is so very small and the locals use it all the time</p>	<p>Thank you for your letter dated April 19, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to</p>

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	<p>for family gatherings, funeral services, baptisms, volleyball, paddling canoe, bbq's with the family, and... it is an extremely historical and special, not crowded Bay for everyone.</p> <p>Can you please be aware that if you build those 150 bungalows it will take this land away from the locals and visitors and bring in a huge crowd to this extremely small, historical, and sacred area can not handle because it is so very small? It will never be the special place that it is today. It will honestly take away from the quiet, loving, mother nature feel of this special bay.</p> <p>Building a cultural center for the Hawaiian people and everyone to enjoy would be very special. Updating the commercial buildings that are already there would be good and creating a walkway so the disabled can get from one side to the other side of the way would be extremely welcomed as well. All of this supports the feel of staying small and local and giving Aloha to the land and the people.</p> <p>Please, your company listened to us when your company wanted to build a new resort at Kahalu'u and you decided to build a park for everyone to enjoy instead. You heard us then, please, hear us now.</p> <p>Please, understand how special this possibly last historical place on the Big Island is to all the locals who live here, and especially the Hawaiian people.</p> <p>I know your company does the right thing because you did the right thing at Kahalu'u beach back in 2016.</p> <p>The Hawaiian people have had so much taken away from them, please let them keep this last sacred bay, the birthplace of their King Kamehameha III, and please keep it special for the rest of us who moved here as well.</p> <p>This bay needs to be preserved for generations to be able to enjoy it without a resort crowd that's like Hapuna beach. This bay is not even a quarter the size of Hapuna, it is so very small, it just can't handle a big resort crowd. It would be very uncomfortable for all of everyone, including the new crowd that would come because everyone laying out their towels to sunbathe, there's just not enough space and I honestly don't think King Kamehameha III would really have wanted his birthplace to be a crowded tourist area. I would think he would want to keep it for his people and the people who love the island.</p>	<p>maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>The Project Area has been heavily infiltrated by non-native and</p>

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	<p>My petition's name is <a href="https://change.org/savetheland">change.org/savetheland</a>, in 8 days, this short amount of time has over 1,681 (and climbing) people agree to please keep this bay as it's been for decades, with just a few changes that would benefit everyone, the land included. So the locals and visitors can fully enjoy it without a resort crowd for generations more.</p> <p>I know your job must be very challenging. You have to see both sides and make a good decision about what is good for the island and the people who live here. You are Kamehameha Schools, that name represents the King who was born in Keauhou Bay. It represents the preservation of the land and the Hawaiian people's history and that is what Keauhou Bay represents. If you take this land away and give it to a crowd of tourists that will come with the 150 bungalows, it is not preserving the land for the next generations of the Hawaiian people that are to come, and the people who love this island, like me, it will take away one of the last historical areas that is fully enjoyed and loved as is by everyone.</p> <p>Plus, if you take out all those trees that help keep the temperature down by providing shade, and help keep erosion down by holding on to the land, the bay could become even more muddy after storms and throughout every day, because those trees provide safety for the bay to not have as much mud. The trees help the bay is many different ways.</p> <p>Adding more commercial builds to this small bay, especially when there are many For Lease signs in Keauhou Shopping Center, is not being sustainable and using what we already have. People don't really shop in this area and I understand wanting to add commercial boutiques for the tourists to shop who would stay in the bungalows but can't you see how this would turn this precious bay into a shopping craze and be like the island of Oahu? It would take away from the beautiful feel of The Big Island. Isn't this nature feel of The Big Island worth saving?</p> <p>I understand making a profit is important and there are many ways to make a profit besides building bungalows in one of the last historical places on the island. There must be a way to turn a profit without taking away from the land, taking away from the Hawaiian people, and everyone who loves and uses this bay daily without a crowd.</p>	<p>invasive species. The KBMP has been designed to ensure that the physical attributes of new development are compatible with the existing landscape. The landscape design integrates native plants and landscaping elements that are representative of the natural and cultural landscape. The landscape design also incorporates xeriscape techniques that complements the dry climate, pays tribute to the region's agricultural past, and incorporates planting of native vegetation.</p> <p>Potential land erosion due to the implementation of the KBMP has been addressed in the Draft Environmental Impact Statement (DEIS). DEIS Section 4.5, describes stormwater runoff peak flow estimates for both existing conditions and with project implementation. At present, portions of the KS properties at Keauhou Bay are unmanaged and susceptible to runoff and erosion. The Project is expected to result in long-term benefits as permanent sediment control measures and stormwater infrastructure would minimize runoff and erosion. Those strategies may include but are not</p>

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	<p>I appreciate you taking the time to hear us and consider our side.</p>	<p>limited to detaining, retaining and infiltrating runoff into the ground. Thank you for your participation in the environmental review process.</p>
<p>Rebecca Melendez (Petition)</p>	<p>Donating \$ after you sign ONLY goes to promoting this petition. We will have a non-profit business to help this cause more soon.</p> <p>Keauhou Bay is historical sacred land. It's also a small commercial and quiet residential area, with a local canoe club that uses the bay daily, local volleyball groups that play there daily, families BBQ every weekend, hold funeral services, baptisms local kids enjoy swimming, and visitors enjoy paddle boarding and kayaking all the time without a crowd.</p> <p>Read their information on this link <a href="https://www.ksbe.edu/keauhou_bay/">https://www.ksbe.edu/keauhou_bay/</a></p> <p>It's possibly the last untouched historical area that has not been seriously developed and it has been a comfortable and quiet bay for locals and visitors alike for many years without a big resort crowd.</p> <p>The beach is just over the size of one volleyball court that is there, with an even smaller park on the other side. It doesn't have a crowded feel and it's not big enough to become a resort area.</p> <p>It is also the historical site of the birthplace of the Hawaiian people's King Kamehameha III. The area holds much history and is a very sacred area to everyone, especially the Hawaiian people.</p> <p>Developers are considering building this area up and putting 150 Resort-style bungalows in this very historical, quiet, charming, and small commercial and residential area that many people have enjoyed as it is for many decades.</p> <p>Not only is the area not big enough for a new resort, but there is already a nice hotel at the point of this bay and Time Share homes right next to that.</p> <p>Both of those work very well with this area and offer tourists a lot of fun places to stay without taking away from the land, its history, quietness, all the local activities, and the small commercial buildings that have been there for many years.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a</p>

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	<p>Updating the commercial builds that are already there would be great, and adding a nice cultural center there would be nice for everyone as well, not just tourists having bungalows.</p> <p>To have a cultural center where people can learn more about the land, and the Hawaiian people can have a place of their own at King Kamehameha III's birthplace would be great.</p> <p>Creating a walkway so the disabled can get from the Northside to the Southside would be another great add, but NOT building 150 new bungalows for a lot of people who don't even live here, who will then crowd the bay because the bay will be the focus for them staying there.</p> <p>Now, besides putting another resort in this area, they want to open up the old road that has been beautifully overgrown with native plants and is located just above the canoe club and goes right through King Kamehameha III's birth site.</p> <p>This will bring a lot of traffic right through this beautiful historical place where many locals hold family funerals, baptisms, birthday parties... It will overcrowd this very small special area that locals and visitors have been using for many decades, in many different loving ways.</p> <p>Putting a road in could also increase the temperature there because of the pavement, and the traffic that will then pass through this beautiful, historical, sacred, and quiet area will be huge.</p> <p>Trees shade this area right now very well and also help keep the erosion down by helping stop a lot of mud and debries from going into the ocean after big tropical storms that the island has sometimes. Without trees the bay could be extra muddy.</p> <p>Plus, they want to add more commercial shops to Keauhou Bay, and Keauhou Shopping Center has a lot of empty For Lease stores available. To create more shops when there are shops empty and For Lease in Keauhou Shopping Center just above the bay, is not being sustainable and using what we already have.</p> <p>Please HELP SAVE Keauhou Bay from becoming a big Resort area. It is one of the last historically untouched areas on the island that has not been</p>	<p>strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>The Project Area has been heavily infiltrated by non-native and invasive species. The KBMP has been designed to ensure that the physical attributes of new development are compatible with the existing landscape. The landscape design integrates native plants and landscaping elements that are representative of the natural and cultural landscape. The landscape design also incorporates xeriscape techniques that complements the dry climate, pays tribute to the region's agricultural past, and incorporates planting of native vegetation.</p> <p>Potential land erosion due to the implementation of the KBMP has</p>

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	<p>overdeveloped and has been fully enjoyed completely by locals and visitors for many decades.</p>	<p>been addressed in the Draft Environmental Impact Statement (DEIS). DEIS Section 4.5, describes stormwater runoff peak flow estimates for both existing conditions and with project implementation. At present, portions of the KS properties at Keauhou Bay are unmanaged and susceptible to runoff and erosion. The Project is expected to result in long-term benefits as permanent sediment control measures and stormwater infrastructure would minimize runoff and erosion. Those strategies may include but are not limited to detaining, retaining and infiltrating runoff into the ground.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>rfpcpa perron</p>	<p>Please stop the insane idea of building a resort on sacred ground.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your concerns related to the boutique resort. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and</p>

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		<p>support the management of the bay and its resources. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process. The income generated from activities at Keauhou Bay – including the resort – will be used to support KS' mission as well as the educational and cultural components of the Keauhou Bay Management Plan. Thank you for your participation in the environmental review process.</p>
Richard (Rick) Bennett	After a quick review of the EIS announcement for Keauhou Bay, I wish to share data that you most likely have not seen. These issues need to be addressed in the EIS.	Thank you for your letter dated March 30, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP)

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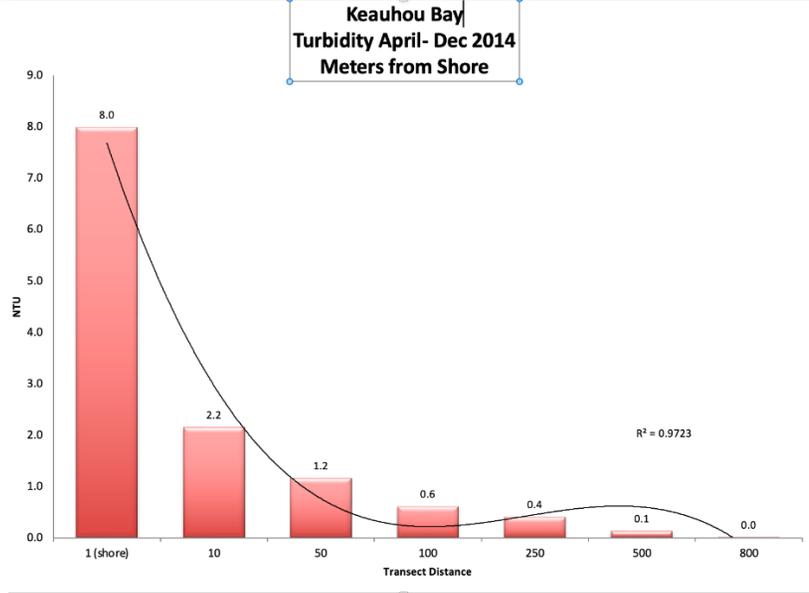
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	<p>Keauhou Bay is listed as Impaired section 303 D Clean Water Act and as such, no further impairment is allowed, and a TMDL for the watershed is required under the law.</p> <p>I alert the issue now rather than wait for the EIS comment period.</p> <p><b>2020 STATE OF HAWAII WATER QUALITY MONITORING AND ASSESSMENT REPORT:</b></p> <p>Integrated Report to the U.S. Environmental Protection Agency and the U.S. Congress Pursuant to §303(d) and §305(b), Clean Water Act (P.L. 97-117)</p> <table border="1" data-bbox="464 602 1283 919"> <caption>Table 11. Hawaii Marine Listed Waters</caption> <thead> <tr> <th>Assessed Water Body</th> <th>Water Body ID</th> <th>Water Body Type</th> <th>Wet/Dry Criteria</th> <th>Impairment(s)</th> <th>TMDL Priority</th> </tr> </thead> <tbody> <tr> <td>Kapoho Tidepools (Vacationland)</td> <td>HI122881</td> <td>C</td> <td>Dry</td> <td>Turbidity</td> <td>L</td> </tr> <tr> <td>Kaunali Point-Kapaa Beach Park</td> <td>HIW00201</td> <td>C</td> <td>Dry</td> <td>TN, NO<sub>3</sub>-NO<sub>2</sub>, NH<sub>4</sub>, CH<sub>2</sub>O</td> <td>L</td> </tr> <tr> <td>Kaunali Point-Kapaa Beach Park (Oceanic)</td> <td>HIW00202</td> <td>O</td> <td>NA</td> <td>TN, TP, Turbidity, CH<sub>2</sub>O</td> <td>L</td> </tr> <tr> <td>Kaunaloa Beach</td> <td>HI261899</td> <td>K</td> <td>NA</td> <td>Turbidity</td> <td>L</td> </tr> <tr> <td>Kaunaloa</td> <td>HI770607</td> <td>K</td> <td>NA</td> <td>TN, NO<sub>3</sub>-NO<sub>2</sub>, NH<sub>4</sub>, TP, Turbidity, PO<sub>4</sub></td> <td>L</td> </tr> <tr> <td>Kawaihae Harbor</td> <td>HI978783</td> <td>B</td> <td>Dry</td> <td>Turbidity</td> <td>L</td> </tr> <tr> <td>Kawaihae Harbor-Pelekane Bay</td> <td>HIW00155</td> <td>B</td> <td>Dry</td> <td>Turbidity</td> <td>L</td> </tr> <tr> <td>Kenehe Point</td> <td>HIW00203</td> <td>K</td> <td>NA</td> <td>NH<sub>4</sub></td> <td>L</td> </tr> <tr> <td>Kaunakakai Bay</td> <td>HIW00149</td> <td>K</td> <td>NA</td> <td>TN, NO<sub>3</sub>-NO<sub>2</sub>, NH<sub>4</sub>, TP, Turbidity, PO<sub>4</sub></td> <td>L</td> </tr> <tr> <td>Kaunakakai Bay (off Curio Stand)</td> <td>HIW00183</td> <td>K</td> <td>NA</td> <td>Turbidity</td> <td>L</td> </tr> <tr> <td>Kaunohou Bay (Kona)</td> <td>HI713293</td> <td>B</td> <td>Dry</td> <td>Turbidity</td> <td>L</td> </tr> <tr> <td>Kelekele Beach Co. Park</td> <td>HI693485</td> <td>C</td> <td>Wet</td> <td>Turbidity</td> <td>L</td> </tr> <tr> <td>Kaunaloa Bay</td> <td>HIW00154</td> <td>K</td> <td>NA</td> <td>TN, NO<sub>3</sub>-NO<sub>2</sub>, TP, Turbidity, PO<sub>4</sub></td> <td>L</td> </tr> </tbody> </table>	Assessed Water Body	Water Body ID	Water Body Type	Wet/Dry Criteria	Impairment(s)	TMDL Priority	Kapoho Tidepools (Vacationland)	HI122881	C	Dry	Turbidity	L	Kaunali Point-Kapaa Beach Park	HIW00201	C	Dry	TN, NO <sub>3</sub> -NO <sub>2</sub> , NH <sub>4</sub> , CH <sub>2</sub> O	L	Kaunali Point-Kapaa Beach Park (Oceanic)	HIW00202	O	NA	TN, TP, Turbidity, CH <sub>2</sub> O	L	Kaunaloa Beach	HI261899	K	NA	Turbidity	L	Kaunaloa	HI770607	K	NA	TN, NO <sub>3</sub> -NO <sub>2</sub> , NH <sub>4</sub> , TP, Turbidity, PO <sub>4</sub>	L	Kawaihae Harbor	HI978783	B	Dry	Turbidity	L	Kawaihae Harbor-Pelekane Bay	HIW00155	B	Dry	Turbidity	L	Kenehe Point	HIW00203	K	NA	NH <sub>4</sub>	L	Kaunakakai Bay	HIW00149	K	NA	TN, NO <sub>3</sub> -NO <sub>2</sub> , NH <sub>4</sub> , TP, Turbidity, PO <sub>4</sub>	L	Kaunakakai Bay (off Curio Stand)	HIW00183	K	NA	Turbidity	L	Kaunohou Bay (Kona)	HI713293	B	Dry	Turbidity	L	Kelekele Beach Co. Park	HI693485	C	Wet	Turbidity	L	Kaunaloa Bay	HIW00154	K	NA	TN, NO <sub>3</sub> -NO <sub>2</sub> , TP, Turbidity, PO <sub>4</sub>	L	<p>prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>Thank you for sharing this information related to water quality and monitoring. Potential land erosion due to the implementation of the KBMP has been addressed in the Draft Environmental Impact Statement (DEIS). DEIS Section 4.5, describes stormwater runoff peak flow estimates for both existing conditions and with project implementation. At present, portions of the KS properties at Keauhou Bay are unmanaged and susceptible to runoff and erosion. The Project is expected to result in long-term benefits as permanent sediment control measures and stormwater infrastructure would minimize runoff and erosion. Those strategies may include but are not limited to detaining, retaining and infiltrating runoff into the ground.</p> <p>Thank you for your participation in the environmental review process.</p>
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**Table 7.2 DEA Summary of Comments and Responses**

**Comments**

**Commenter**

**Responses**



**2019 Keauhou Ortho-Phosphate Results per §11-54-6**

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.97
R Square	0.95
Adjusted R Square	0.94
Standard Error	4.14
Observations	6

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	1298.56	1298.56	75.88	0.00
Residual	4	68.46	17.11		
Total	5	1367.02			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	229.98	22.37	10.28	0.00	167.86	292.09	167.86	292.09
X Variable 1	-8.29	0.72	-8.71	0.00	-8.29	-4.28	-8.29	-4.28

Summary for Jan 2019 Data	Hawaii Department of Health Criteria for PO <sub>4</sub>
Y = -6.26x + 229.98	Y = -3.22x + 118.06
95% CI = -8.29	

Conclusion  
 -8.29 > -3.22 Jan 2019 Keauhou data exceeds HDOH criteria for PO<sub>4</sub>.

**Table 7.2 DEA Summary of Comments and Responses**

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	<p><b>2019 Keauhou Nitrate+Nitrite Results per §11-54-6</b></p> <p>SUMMARY OUTPUT</p> <table border="1"> <thead> <tr> <th colspan="2">Regression Statistics</th> </tr> </thead> <tbody> <tr> <td>Multiple R</td> <td>0.99</td> </tr> <tr> <td>R Square</td> <td>0.97</td> </tr> <tr> <td>Adjusted R Square</td> <td>0.97</td> </tr> <tr> <td>Standard Error</td> <td>40.35</td> </tr> <tr> <td>Observations</td> <td>6</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="5">ANOVA</th> </tr> <tr> <th></th> <th>df</th> <th>SS</th> <th>MS</th> <th>F</th> <th>Significance F</th> </tr> </thead> <tbody> <tr> <td>Regression</td> <td>1</td> <td>227929.74</td> <td>227929.74</td> <td>139.97</td> <td>0.00</td> </tr> <tr> <td>Residual</td> <td>4</td> <td>6513.76</td> <td>1628.44</td> <td></td> <td></td> </tr> <tr> <td>Total</td> <td>5</td> <td>234443.51</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th></th> <th>Coefficients</th> <th>Standard Error</th> <th>t Stat</th> <th>P-value</th> <th>Lower 95%</th> <th>Upper 95%</th> <th>Lower 95.0%</th> <th>Upper 95.0%</th> </tr> </thead> <tbody> <tr> <td>Intercept</td> <td>2877.98</td> <td>218.24</td> <td>13.19</td> <td>0.00</td> <td>2272.08</td> <td>3483.91</td> <td>2272.08</td> <td>3483.91</td> </tr> <tr> <td>X Variable 1</td> <td>-83.27</td> <td>7.04</td> <td>-11.83</td> <td>0.00</td> <td>-102.82</td> <td>-63.73</td> <td>-102.82</td> <td>-63.73</td> </tr> </tbody> </table> <p>Summary for Jan 2019 Data  <math>Y = -83.27x + 2877.98</math>  95% CL = -102.82</p> <p>Hawaii Department of Health Criteria for NO<sub>3</sub>  <math>Y = -31.92x + 1100.59</math></p> <p>Conclusion   -83.27  &gt;  -31.92  2015 Keauhou data exceeds HDOH for NO<sub>3</sub></p> <p>Certified Lab Results NELHA Pamela Madden</p> <p>The bay is not listed for N and P because the state does not do chemistries on most coastal waters. It just means there is no data upon which to make the listing decision</p>	Regression Statistics		Multiple R	0.99	R Square	0.97	Adjusted R Square	0.97	Standard Error	40.35	Observations	6	ANOVA						df	SS	MS	F	Significance F	Regression	1	227929.74	227929.74	139.97	0.00	Residual	4	6513.76	1628.44			Total	5	234443.51					Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%	Intercept	2877.98	218.24	13.19	0.00	2272.08	3483.91	2272.08	3483.91	X Variable 1	-83.27	7.04	-11.83	0.00	-102.82	-63.73	-102.82	-63.73	
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<p>Richard (Rick) Bennett</p>	<p>As Na Maka o ke Kai for Kona and a 20-year resident, we have been closely tracking the challenges of the tiny inlet, Keauhou Bay. I am responding in the comment period noticed in the EISPN for the bay.</p> <p>For over a decade, the bay water has been subject to algae and limu blooms that significantly increase turbidity and limit visibility. Keauhou Bay is currently listed as Impaired under section 303(D) of the Clean Water Act. As such, landowners, and government agencies must act to limit and resolve the impairment. To date, no action has been taken by the HDOH Clean Water Branch, The County of Hawaii, or local landowners. The Clean Water Act requires a nutrient budget or TMDL for the bay, however, the state does not enforce this provision under authority granted by the EPA.</p> <p>These blooms are associated with increases in nitrate and phosphate in the water column. Phosphates are bound to soil particles and nitrates are freely water-soluble.</p> <p>The recent Lyngbia blooms in the bay suggest that rate-limiting concentrations of phosphate have been exceeded. Lyngbia is a</p>	<p>Thank you for your letter dated April 21, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>Thank you for sharing this information related to water quality and monitoring. Potential land erosion due to the implementation of the KBMP has been addressed in the Draft Environmental Impact Statement (DEIS). DEIS Section 4.5, describes stormwater runoff peak</p>																																																																				

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	<p>Cyanobacteria that can fix nitrogen from the atmosphere but requires phosphates to do so.</p> <p>Nitrates leach into the sea from regional cesspits and septic systems. In contrast, phosphates move into the bay on sediments. For the most part, sediment transfer into the nearshore waters is limited by the lack of soil along the Kona Coast. However, in the case of Keauhou Bay, sediments and fine soils are eroding from land and parking areas adjacent to Kamehameha III and the cul-d-sac end of the road. The dry well drain is commonly overwhelmed by heavy rains, and sediment flows into the well, causing the well to cease working and overflow. The overflows with significant erosive force further move sediments into the bay. The shallow end of the bay has a thick layer of sediment and no viable corals.</p> <p>I enclose a series of photos and a link to a Youtube video documenting the issue. I trust the EIS will thoroughly examine the impacts of regional land uses on the water quality of Keauhou Bay.</p> <p><a href="https://www.youtube.com/watch?v=auNHb4FK518">https://www.youtube.com/watch?v=auNHb4FK518</a></p>	<p>flow estimates for both existing conditions and with project implementation. At present, portions of the KS properties at Keauhou Bay are unmanaged and susceptible to runoff and erosion. The Project is expected to result in long-term benefits as permanent sediment control measures and stormwater infrastructure would minimize runoff and erosion. Those strategies may include but are not limited to detaining, retaining and infiltrating runoff into the ground.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Robbie K</p>	<p>Please please please do not touch keauhou. Resident here my my whole life...</p> <p>I'm a full time commercial fisherman an I have been accessing the ramp for over a decade. With the manta dives an the influx of tourist, there has been no parking for us fisherman .To make a bungalo style resort would only take away from the people here an add money to your pockets. This is a cultural no no...some days I can't even get my trailer to the ramp because of overcrowding tourist.</p> <p>Now how dangerous has the bay become? People swimming in the boat ramp , people with no red flags or bouys. Sharks ,</p> <p>We have a canoe club that has been there for longer than I have been alive.</p> <p>The influx of cars parking on the road is crazy.. we have a farmers market on certain days at the outrigger an the cars are strewd out all the way up the shoulder.. some are parked illegally because theres no where to go.. in the</p>	<p>Thank you for your letter dated April 19, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statues Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand</p>

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Comments	Commenter	Responses
	<p>last ten years I've seen keauhou go from a beautiful bay , to an over crowded(rich privileged) area.</p> <p>I can tell you that nobody local will be happy with this plan. Its absurd to even mention such a thing.</p> <p>Now, what's needed at keahou, better access and regulated swimming area. more parking for trailers , less tourist. Less manta boats. More ramp wash down because we wait for 30 minutes sometimes because theres only 4 spickets of water.</p> <p>With all of this being said I'll pray you folks dont touch this area because you had an idea of change. We dont need change. We need help. So help everyone that uses the beautiful bay of keauhou be able to use it in the future without another 1000 people down there. I also no for a fact that whoever's in on this has not seen how many people are already down there on a manta night .. this is not Oahu an let's keep it that way.</p> <p>NO To Keauhou bay !</p>	<p>and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>We acknowledge your concern that additional parking is needed for commercial users and residents. One objective of the Project is to improve existing parking areas to</p>

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Comments	Commenter	Responses
		<p>enhance their capacity, safety, and security. DEIS Section 3.2.5 discusses the Project’s proposed parking improvements. After full build out of the Project, the supply of parking for both the general public and for boat trailers is expected to increase (88 new parking stalls and 23 new boat trailer parking stalls).</p> <p>Thank you for your participation in the environmental review process.</p>
Russell K Laros III	<p>I am writing to express my support for the Keauhou Bay Management Plan Project as it was presented to the Economic Development Committee of the Kona-Kohala Chamber of Commerce.</p>	<p>Thank you for your letter dated April 25, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai’i Revised Statutes Chapter 343.</p> <p>We greatly appreciate your support of the Project. Thank you for your participation in the environmental review process.</p>
Sally Ann Rankin	<p>Many years ago when Kamehameha Schools held some the first ‘community meetings’ regarding the KBMP I found out through the coconut wireless, ended up attending, voiced my opinion, which sadly came upon mostly deaf ears as the updated plan did not take any of the concerns of the neighbors into real consideration.</p> <p>While community organizations were consulted and invited, there was a lack of any real effort to communicate or listen to the residents of Keauhou Bay. I’ve already been informed on multiple occasions, that you have completed what was required of KS, and that is fine, but when a majority of residents are</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai’i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward</p>

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Comments	Commenter	Responses
	<p>not aware, and the ones that are, oppose, I would hope as Hawaiians, you would feel some obligation to care and have a real responsibility to listen, wether mandated by law or not.</p> <p>The KBMP clearly does not establish a responsible stewardship or nurture a positive and enduring relationship when you insist on adding another 150 hotel rooms, more commercial space, creating through traffic in a quiet residential area, and paving multiple parking lots to an already fragile bay.</p> <p>Beginning to properly manage the existing commercial space and cultural heritage sites, which you've acknowledge has been poorly taken care of, in and around Keauhou Bay, would seem much more urgent than overdeveloping and overburdening the bay. Once you develop this 'aina, it will never be the same, and it can never be recovered.</p> <p>The only thing I can see that this development, in its current proposal, has accomplished and perpetuated is creating more extractive industry.</p> <p>Na'u me ke mahalo,</p>	<p>of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>values that were identified during the KBMP process.</p> <p>Consultation with community groups and stakeholders has been ongoing since 2016. KS takes the concerns of its neighbors seriously. Input from community has guided this planning process from the beginning and will continue to do so throughout the HRS 343 Environmental Review Process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Sarah P. Kihoi (Puna)</p>	<p>I am a retired teacher and Social Worker. I have worked for Kamehameha Schools in Extension Education and also at Queen Liliuokalani Trust, Kona Office.</p> <p>A Kona Kupuna sent word that they are planning to build a Hotel, above the birthplace of Kauikeaouli. I am opposed to this. This area is sacred. If anything it should be left as is, and the children of Hawaii be taught of the historical significance of the area, the wahi pana.</p> <p>The Kona district has many historic sites. Please, I ask that you respect this and listen to the voices of your Kūpuna.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your concerns related to the boutique resort. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to</p>

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		<p>achieve the goal of developing resilient communities by stewarding the ‘āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process. The income generated from activities at Keauhou Bay – including the resort – will be used to support KS’ mission as well as the educational and cultural components of the Keauhou Bay Management Plan.</p> <p>DEIS Section 4.1 discusses cultural, archaeological, and historic resources within the Project Area. The KBMP proposes to establish a new cultural heritage corridor with the aim to preserve and protect the most culturally significant and vulnerable sites while enhancing opportunities for the public to engage and learn about their importance. Implementation of the Project is anticipated to generate long-term benefits by preserving sensitive archaeological sites and</p>

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		<p>implementing a plan to steward the sites in perpetuity.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Scott Tieche</p>	<p>Earthings,                      My wife and I own at Kanaloa at Kona where we spend a few months a year and more as time goes on. This project is oversized and a terrible idea for one of the last public ocean access. Not only is it defiling a historic area, it will create traffic issues, congestion and ruin the community character of Keauhou Bay and Heiea Bay.                      Stop this land grab.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a</p>

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		<p>strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>We understand that parking and circulation has been challenging in residential neighborhoods surrounding Keauhou Bay. Street capacity and traffic circulation was taken into consideration during the development of alternatives. The Project involves multiple design elements to improve overall circulation and alleviate congestion. The Project proposes to improve the Old Kona Road to support multi-model transportation options while also providing a linkage across the two sides of the Bay. The roadway is intended to be pedestrian orientated to serve as a key walking route for residents and resort guests to access the dining,</p>

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Comments	Commenter	Responses
		<p>commercial, and recreational activities throughout the area.</p> <p>The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr &amp; Peers to identify and assess existing and future mobility option as well as potential traffic impacts generated by the Project (<i>Appendix E</i>).The MAR found that the implementation of the Project would not result in significant traffic impacts.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Sheila Braithwaite</p>	<p>I have downloaded your 88 page Keauhou Bay Management Plan It will take a while to try and understand. My interest was piqued by two published opinions, One by Dennis Gregory and the other written by Kathy McMillen.</p> <p>I lived on a barrier island abutting Back Bay National Wildlife Refuge. The community changed forever in the most negative way as zoning from the 1960's came to be when sewers came in 2000.</p> <p>ZONING does not make a project sensible.</p> <p>Being a recent member of this beautiful island, I drove to see the area of this project. It seems overblown and insensitive, in my opinion. Will continue to watch.</p>	<p>Thank you for your letter dated April 12, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand</p>

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		<p>and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
Sierra Gomez	Hello! I Hope this email finds you well and I hope by now the closing date you understand how important this land is to locals of Kona. This space is so special and allows people to meet up daily for outdoor activities while setting	Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement

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	<p>us apart from complete tourism. Please don't tear down land that supports outdoor activities and health on people. Health is more important than profit and I hope coming out of Covid and the mess it has been that that is more apparent than ever. We need this space!!!</p>	<p>Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to</p>

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		<p>achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>The KBMP proposes to create a mauka / makai corridor to improve public shoreline access and to enhance the area for educational, recreational, and cultural activities. Draft Environmental Impact Statement (DEIS) Section 3.2.3 describes the Project’s aim to visually and spatially consolidate the mauka and makai recreation areas to create an expanded shoreline park. Implementation of the plan is expected to enhance opportunities for ocean recreation and cultural use of the shoreline.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Sonja Schmidt</p>	<p>I am a resident in the Keauhou area, and have owned here for twelve years. For over 30 years my family came to Keauhou to vacation, and I learned to snorkel, dive, paddle and breathe in this bay. I learned to honor the Hawaiian history and heritage of the area, and when the time came to live here full time, I didn’t hesitate to purchase near Keauhou Bay.</p> <p>I now spend at least part of most every day by the bay, either walking my dog, paddling, or swimming. Sometimes I just sit on the rocks and listen to the waves. My granddaughters have now learned to snorkel and paddle board in</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai’i Revised Statutes Chapter 343.</p>

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Comments	Commenter	Responses
	<p>the bay. The small beach suits us for its proximity to our home, the respect the canoers and boaters give each other.</p> <p>I have read of some of the plans to develop the area. You should also know that I am a real estate agent, and have sold many homes in the Keauhou area. The value to most people is in its uniqueness, smallness, closeness and historical character. People value the unique character of Keauhou. I understand the challenge to be good stewards of the land, make the best use of it, but also, understand that large changes aren't usually welcomed, and in fact ends up destroying what people love about Keauhou Bay. I've watched the Kamehameha Schools act in many different ways towards this land .....once keeping the roadsides trimmed, and providing maintenance, now I among others pick up the trash along the roadway to the harbor. The citizens and small business owners here (already existing hotel Outrigger being one) take responsibility for maintaining the character and honor the nature of the place. It is with a sense of horror I think about what a second large hotel here might do. I can't pick up after any more people!!</p> <p>This letter is to ask for reconsideration of the increased thoroughfare , as traffic does not result in a better quality of the environment, and to ask for reconsideration of the proposed large hotel just above the Bay. We have adequate rental rooms with the Outrigger....who are welcomed as the next stewards of the point. Any plans should seek to minimize impact, and drawing 150 new people a day to the Bay will not minimize the impact...</p> <p>It is not lost on me that today is Earth Day....begun so long ago to remind us all that we only have one planet...one Keauhou Bay....one chance to get it right...so my unborn as yet great grandchildren can learn to paddle, and swim, and sit by the rocks some day too.</p>	<p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational</p>

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Comments	Commenter	Responses
		<p>values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Steve Oliver</p>	<p>I want to voice my opposition to further development in the bay as proposed by kamehameha schools trust. This has not had enough time for public input nor adequate awareness made of what's proposed. I feel this is being rushed through with input or fine tuning from the public. We need to focus on adequate infrastructure being provided by the increased resort traffic and its affect on local residents and the greater good for the non resort using public. Kamehameha schools has unlimited resources and a deep history of corruption. I believe that's mostly in the past but Hawaii is famous for shady deals with developers and politicians and appearances are that this is more of the same. Appearances and perceptions count. KS has taken far too long to develop the other Alii drive properties and this is not good stewardship. They have the money finish these developments in short order but the drag their feet. This is not evidence of good faith for future development.</p> <p>Thanks for your consideration and please vote no or at the least allow more time for debate and modifications. KS is in a hurry to get approval but won't hurry on completion disrupting the entire neighborhood for years maybe decades.</p>	<p>Thank you for your letter dated April 21, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a</p>

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		<p>strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the ‘āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
Sylvie	I oppose this!!!!	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai‘i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which</p>

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		<p>leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
Tamyra Rice	<p>I appreciate the chance to comment on the Keauhou Bay Management Plan Environmental Impact Statement Preparation Notice (EISPN).</p> <p>I write as a condo owner at Keauhou Resort to raise questions about the EISPN, particularly with regard to lack of specific information contained</p>	<p>Thank you for your letter dated April 20, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP)</p>

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Comments	Commenter	Responses
	<p>therein. I also question the lack of notice given to owners of nearby properties.</p> <p>This development plan will increase the demand for water (given the 150 unit resort, pool, and additional commercial buildings). flow will local water sources be impacted? What measures will be taken to secure and protect water resources</p> <p>given the decrease of water in the area’s aquifers and operational issues with some of the wells?</p> <p>With respect to the 150 unit resort, how many employees will there be and where will all of the employees park? I pose the same query with respect to the employees of the restaurant, other commercial enterprises, and the cultural center? Where will all of the visitors, who are embarking on boats, park? What measures will be taken to ensure the safety of pedestrians?</p> <p>How will this new development impact the health of Keauhou Bay? The water quality is bad some days now according to the frequent testing done by the Keauhou Canoe Club. The increase of blacktop will increase polluted runoff. What mitigation measures will be taken to safeguard the water quality of the Bay?</p> <p>Additional blacktop, which will replace the existing forested land, will change the climate of the area, raising the temperature. What mitigation measures are envisioned to address this issue?</p> <p>This proposed development, in part, will take place at the shores of the Keauhou Bay. What mitigation measures are going to be taken to address sea level rise and other tidal events?</p> <p>Have studies been conducted to ensure that there are no rare, endangered or threatened wildlife species or habitat given the anticipated replacement of the forested land with blacktop?</p> <p>This development plan does not include the popular volleyball court. What measures will be taken to replace this healthy activity for local children?</p> <p>How will the traffic patterns be designed in this plan? What will the traffic flow look like during construction of the major facilities such as the 150 unit</p>	<p>prepared pursuant to Hawai’i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS’ mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the ‘āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new</p>

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	<p>resort? Will traffic studies be done to document current traffic levels and establish a baseline?</p> <p>Has a qualified noise consultant been retained? What will be the increase in ambient noise levels in the surrounding neighborhoods? Will noise level studies be done to document current noise levels and establish a baseline?</p> <p>This plan, if implemented, will result in a substantial increase in traffic, noise, and vehicular emissions. What mitigation measures will be taken in the surrounding neighborhoods to reduce these impacts?</p> <p>Thank you for addressing the foregoing concerns. Kindly respond to my queries as part of your public review process and to me by email.</p>	<p>development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Section 4.12.1 of the Draft Environment Impact Statement (DEIS) provides detailed estimates of the average daily water demand for the various project components. In total, the Project will result in an average water demand of approximately 97,466.2 GPD. Based on these estimates, impacts to the public water supply are not expected.</p> <p>Potential land erosion due to the implementation of the KBMP has been addressed in the Draft Environmental Impact Statement (DEIS). DEIS Section 4.5, describes stormwater runoff peak flow estimates for both existing conditions and with project implementation. At present, portions of the KS properties at Keauhou Bay are unmanaged and susceptible to runoff and erosion. The Project is expected to result in long-term benefits as permanent sediment control measures and stormwater infrastructure would minimize runoff and erosion. Those</p>

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		<p>strategies may include but are not limited to detaining, retaining and infiltrating runoff into the ground.</p> <p>DEIS Section 4.7.3 discusses flood hazards and mitigation measures. New construction and substantial site improvements will require compliance with the County's floodplain management regulations (Section 27 of the County Code). Therefore, the risk of potential damage from these flood hazards should be minimized by compliance with County requirements.</p> <p>Portions of the project site will experience passive flooding as a result of 3.2 feet of global sea level rise predicted by 2100. KS is committed to proactively planning and designing the Project to be resilient to ensure the ongoing successful, safe, and sustainable operation of the bay for the foreseeable future.</p> <p>A Natural Resource Assessment was conducted for the Draft EIS (DEIS) by AECOS (Appendix C). Please refer to Section 4.6 of the DEIS for discussion of native species, endangered species, and critical habitat in relation to the KBMP. The Project Area has been heavily infiltrated by non-native and</p>

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		<p>invasive species. As discussed in the Natural Resource Assessment, no species listed as threatened or endangered by state or federal statutes were identified on any of the project parcels at Keauhou Bay. The potential exists that several listed species might transit or utilize the general area on occasion. Please refer to DEIS Section 4.6 for further discussion on potential impacts and mitigation measures.</p> <p>At present, KS does not have an agreement with any entity for use of the volleyball court. Further complicating the matter, a portion of the land underneath the court is within the County right-of-way and therefore outside of KS ownership. KS is committed to the continued consultation with elected officials and representatives of the Kona area to discuss how outdoor recreational activities such as volleyball can be planned in more appropriate areas.</p> <p>The KBMP proposes to create a mauka / makai corridor to improve public shoreline access and to enhance the area for educational, recreational, and cultural activities. Draft Environmental Impact Statement (DEIS) Section 3.2.3</p>

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<b>Comments</b>	<b>Commenter</b>	<b>Responses</b>
		<p>describes the Project's aim to visually and spatially consolidate the mauka and makai recreation areas to create an expanded shoreline park. Implementation of the plan is expected to enhance opportunities for ocean recreation and cultural use of the shoreline.</p> <p>We understand that parking and circulation has been challenging in residential neighborhoods surrounding Keauhou Bay. Street capacity and traffic circulation was taken into consideration during the development of alternatives. The Project involves multiple design elements to improve overall circulation and alleviate congestion. The Project proposes to improve the Old Kona Road to support multi-modal transportation options while also providing a linkage across the two sides of the Bay. The roadway is intended to be pedestrian orientated to serve as a key walking route for residents and resort guests to access the dining, commercial, and recreational activities throughout the area.</p> <p>The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis</p>

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		<p>Report (MAR) was prepared by Fehr &amp; Peers to identify and assess existing and future mobility option as well as potential traffic impacts generated by the Project (<i>Appendix E</i>).The MAR found that the implementation of the Project would not result in significant traffic impacts.</p> <p>An Acoustic Study was conducted for the DEIS by Y. Ebisu and Associates (<i>Appendix F</i>). Overall, the results of the Noise Assessment indicate that no significant increases in noise levels are predicted to occur as a result of traffic following the full buildout of the Project. Short-term noise impacts associated with Project construction activities may occur during the earthwork and excavation phases, when site preparation work and/or roadway construction occur. In addition to the anticipated application of State Department of Health noise permit requirements and procedures during noisy construction activities, the use of quieted portable engine generators and diesel equipment will be specified for use within 500 ft of noise sensitive properties. Heavy truck and equipment staging</p>

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		<p>areas will also be located at areas which are at least 500 ft from noise sensitive properties. For further discussion, please refer to section 4.13 of the DEIS.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Tiara HewLen</p>	<p>I am writing on behalf of our 'ohana. We have 7 keiki with my Kane and I. My Kane and keiki are all beneficiaries of Kamehameha Schools.</p> <p>We do not support the adding of boutique resorts especially above cultural significant areas.</p> <p>Adding a resort of any kind will add more traffic, congestion, and depletion of our natural resources for commercial activity on our delicate shorelines.</p> <p>This also deters beneficiaries of KS to access culturally sacred places.</p> <p>Our only public Hawaiian Immersion school is in need of adequate facilities as they are overcapacity with current enrollment (175% this year). Could KS not make more opportunity for our keiki to form a better relationship with this 'āina instead of it being overrun with tourists desecrating the birth place of our Ali'i?</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your concerns related to the boutique resort. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting</p>

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		<p>uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process. The income generated from activities at Keauhou Bay – including the resort – will be used to support KS’ mission as well as the educational and cultural components of the Keauhou Bay Management Plan.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Tom Fetter</p>	<p>Thank you for providing both the EISPN Document and for hosting the informative virtual public meeting on April 11,2022. The public outreach is appreciated.</p> <p>My wife and I have owned a home at 78-120 Holua Rd, on the north side of Keauhou Bay since 2013. This has allowed us to observe the use and issues involving the Bay first hand. Our comments and opinions follow:</p> <p>As you are well aware, Keauhou Bay is an historic and unique site. It is also heavily used by tourist-serving ocean activities. The three primary commercial vessels, the Holu Nui, Tradewinds II, and the Hula Kai may average a total of as many as 100 passengers a day. The boat ramp is very active with fishing boats, fishing rental trips, group kayak excursions and inflatable boats taking passengers daily on snorkeling and diving excursions. The Bay access is used by paddle boarders, kayakers, surfers, snorkelers, swimmers and canoe paddlers from the Keauhou Canoe Club and the local high school teams. Attracting substantially more users will diminish the enjoyment of all.</p> <p>Based on its limited size one could easily conclude that the Bay is near capacity for recreational users.</p>	<p>Thank you for your letter dated April 17, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai’i Revised Statutes Chapter 343.</p> <p>We acknowledge your concerns related to the boutique resort. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. Guided by KS’ mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to</p>

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	<p>The historical significance of the site is appropriately noted in the EISPN. The Royal Birthplace deserves to be appropriately honored and improved. Ideally this would be accomplished not only by the improvements outlined in the EISPN but also by replacing most of the parking the lot adjacent to the pier (on the waterfront) with grass. Obviously a small loading/unloading zone adjacent the pier for the commercial vessels would be necessary as well as a few ADA parking spaces, but ideally most of this area would be turned into a grassy park to further enhance the area around the Royal Birthplace. As you have suggested present office and retail spaces that crowd the landing area could be relocated.</p> <p>KS does own land here with potential economic value, provided that it could be developed without detriment to the public. In our opinion, the proposed resort hotel and commercial development that KS plans would in fact constitute a severe negative impact as a result of overcrowding this tight site. The resort hotel should not be approved or allowed by the County in order to protect the Public's interests.</p> <p>The mission of KS should be fulfilled by maximizing income from other properties where there will be a greater return on investment and less detriment to the public. These opportunities exist.</p>	<p>achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process. The income generated from activities at Keauhou Bay – including the resort – will be used to support KS' mission as well as the educational and cultural components of the Keauhou Bay Management Plan.</p> <p>We acknowledge your concern that additional parking is needed for commercial users and residents. One objective of the Project is to improve existing parking areas to enhance their capacity, safety, and security. DEIS Section 3.2.5 discusses the Project's proposed parking improvements. After full build out of the Project, the supply of parking for both the general public and for boat trailers is expected to increase (88 new</p>

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		<p>parking stalls and 23 new boat trailer parking stalls).</p> <p>DEIS Section 4.1 discusses cultural, archaeological, and historic resources within the Project Area. Several recorded archaeological sites within the Project Area are in areas with overgrown vegetation and not easily accessible. The KBMP proposes to establish a new cultural heritage corridor with the aim to preserve and protect the most culturally significant and vulnerable sites while enhancing opportunities for the public to engage and learn about their importance. Implementation of the Project is anticipated to generate long-term benefits by preserving sensitive archaeological sites and implementing a plan to steward the sites in perpetuity.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Tony Tate</p>	<p>Aloha - I am opposed to the Keauhou Bay Management Plan as presented in the recommendations. I am greatly in FAVOR of restoring the cultural landscape and creating pedestrian areas and areas for all persons in Hawaii to educate themselves on the history of the Hawaiian people. I am OPPOSED to the recommendations of creating a boutique resort, new commercial areas, and new automobile roadways.</p> <p>As one of the few ocean bays on the west side of Hawaii that is not developed, it is imperative that this bay and surrounding area be preserved.</p>	<p>Thank you for your letter dated April 21, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p>

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	<p>There is no need for another hotel in Kona given that many are already decrepit and remain unused. Further, there are plenty of store fronts that are vacant in the nearby Keauhou shopping center for commercial activities with ample parking.</p> <p>In looking at the will of Bernice Pauahi Bishop, it is hard to understand how the trustees could believe she would have wanted yet another hotel for foreigners and the commercial development of the birthplace of Kamehameha III. Her stated wishes were to advance the educational attainment of the Hawaiian people.</p>	<p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational</p>

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		<p>values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Tyler Cathey</p>	<p>Im saddened to hear the volleyball court is in jeopardy again. Seems like the court has constantly been threatened with removal despite the routine, weekly use of the court by locals. Keauhou is the best court in all west Hawai'i. Coconut Grove is busy and can be dangerous. Magic Sands court is shallow, rocky, and can be a dangerous area.</p> <p>The Keauhou volleyball court is the perfect home for many volleyballers who just want peaceful, aloha volleyball. There are many keiki who learn to play here. And there are multiple groups who use this court on an ongoing regular, weekly basis.</p> <p>We have lots of money-making structures around here. Can you please leave the volleyball court for us? I promise it is loved by many.</p>	<p>Thank you for your letter dated March 30, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>At present, KS does not have an agreement with any entity for use of the volleyball court. Further complicating the matter, a portion of the land underneath the court is within the County right-of-way and therefore outside of KS ownership. KS is committed to the continued consultation with elected officials and representatives of the Kona area to discuss how outdoor recreational activities such as volleyball can be planned in more appropriate areas.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Vic Ferro</p>	<p>I am one of many who oppose what has been submitted by those wanting to make drastic changes to Keauhou Bay. I live at the corner of Ali'i and Kaliopapa. The traffic, noise and engine pollution continue to create an unhealthy environment. Imagine what it will be like when the proposed drastic changes take place. Hotel, restaurants, commercial shops, through roads and</p>	<p>Thank you for your letter dated April 21, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP)</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>new roads are built. Our aina will be forever scarred. The sacred sites at Keauhou Bay will suffer. Please act for all the people.</p>	<p>prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Vicki Hunter</p>	<p>I am writing to express my opposition to the proposed resort in Keauhou Bay. I live on Kam III and the traffic here is already out of control with people speeding down our road constantly. It is dangerous. In addition, parking is already difficult in and around the bay. The project will only increase traffic.</p> <p>The space currently used by locals and visitors at the base of Kam III needs to be preserved.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>We understand that parking and circulation has been challenging in residential neighborhoods surrounding Keauhou Bay. Street capacity and traffic circulation was taken into consideration during the development of alternatives. The Project involves multiple design elements to improve overall circulation and alleviate congestion. The Project proposes to improve the Old Kona Road to support multi-model transportation options while also providing a linkage across the two sides of the Bay. The roadway is intended to be pedestrian</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>orientated to serve as a key walking route for residents and resort guests to access the dining, commercial, and recreational activities throughout the area.</p> <p>The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr &amp; Peers to identify and assess existing and future mobility option as well as potential traffic impacts generated by the Project (<i>Appendix E</i>).The MAR found that the implementation of the Project would not result in significant traffic impacts.</p> <p>Thank you for your participation in the environmental review process.</p>
Victoria Reynolds	<p>Our family is completely against the plan to build yet another boutique hotel on a culturally sensitive site on the Big Island. This is the birthplace of Kauikeaouli!!!!</p> <p>It's bad enough that the community, kumu and ohana had to deal with the building and tearing down of 2 hotels at Kahau'u as it was admitted it wasn't appropriate to build at sensitive sites. Do we need to do this again?</p> <p>Culturally sensitive sites, once destroyed, are never to be repaired and replaced. We've seen that on the mainland, in Australia, in NZ.</p> <p>Save our sites!!! We have enough hotels and boutiques.</p>	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statues Chapter 343.</p> <p>We acknowledge your concerns realted to the boutique resort. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>specific kuleana to maintain and support the management of the bay and its resources. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process. The income generated from activities at Keauhou Bay – including the resort – will be used to support KS' mission as well as the educational and cultural components of the Keauhou Bay Management Plan.</p> <p>The former Keauhou Beach Hotel (Kahaluu Ma Kai) is a different site. There are educational opportunities we want to take advantage of that were not conducive with the previous hotel structure. The income generated from activities at</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>Keauhou Bay will be used to support KS' mission as well as the educational and cultural components of the Keauhou Bay Management Plan.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Vince Costanzo</p>	<p>I have recently learned that there are possible plans to modify the historic and natural beauty at Keauhou Bay. Owning property in the immediate area I am very strongly against any such action(s) as this would be a desecration to the area. I am against this, the additional traffic it will bring, the additional commercial spaces and 100% against the addition of a single hotel room added to this currently tranquil area.</p>	<p>Thank you for your letter dated April 26, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
Vince Mott	Keauhou Bay should stay as it is!	<p>Thank you for your letter dated April 22, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its</p>

**Table 7.2 DEA Summary of Comments and Responses**

<b>Comments</b>	<b>Commenter</b>	<b>Responses</b>
		<p>resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
<p>Wendy Malabuyo</p>	<p>I listened tonight and I am excited to see improvement plans for this special and historic site.</p> <p>Given the popularity of the volleyball court and the positive impact it has on the local community, it seems like a very low-cost feature that can provide goodwill and bring in money. Maybe relocate to a different spot from the current space.</p> <p>Anyway, you all have a challenging road ahead from the sound of the feedback but I am very excited to see the improvements.</p> <p>Appreciate your time to reading my comments.</p>	<p>Thank you for your letter dated April 11, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>At present, KS does not have an agreement with any entity for use of the volleyball court. Further complicating the matter, a portion of the land underneath the court is within the County right-of-way and therefore outside of KS ownership. KS is committed to the continued consultation with elected officials and representatives of the Kona area to discuss how outdoor recreational activities such as volleyball can be planned in more appropriate areas.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Whit and Jo Parker</p>	<p>We have carefully reviewed the EISPN for Keauhou Bay and have concerns about this development. We currently spend a few months in Kona and are considering retiring to our Keahou Akahi condo full-time this year. However, should the development be approved, we would need to reconsider the decision to reside here full time and will likely sell and find a home out of this impact zone.</p> <p>One of the reasons we love the area is that it's relaxed and non-resort-like, despite being a stones-throw from the Outrigger, which does not impact our quality of life – they have sufficient parking, a massive grass area...something</p>	<p>Thank you for your letter dated April 7, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>the Keauhou Bay developers are not adequately planning for. The last thing we need is more cars and more overnight lodging. Add to that the gigantic restaurant, tacky tourist sales huts and more, and it's a bad plan.</p> <p>As we are certain others will address the myriad issues wrong with the proposed development, we offer the following for consideration:</p> <ul style="list-style-type: none"> <li>- Does Kamehameha Schools need this sort of investment vehicle to meet its mission?</li> <li>- Is a resort development in the shadow of King Kamehameha III's birthplace any way to honor his legacy and the heritage of the Hawaiian people? (Seems to us he'd be rolling over in his grave with this plan)</li> </ul> <p>We urge the Planning Commission to rule on the side of true preservation and work toward development plans focused on protecting a community gathering area and not creating another resort.</p>	<p>of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational</p>

**Table 7.2 DEA Summary of Comments and Responses**

<b>Comments</b>	<b>Commenter</b>	<b>Responses</b>
		<p>values that were identified during the KBMP process.</p> <p>We acknowledge your concern that additional parking is needed for commercial users and residents. One objective of the Project is to improve existing parking areas to enhance their capacity, safety, and security. DEIS Section 3.2.5 discusses the Project's proposed parking improvements. After full build out of the Project, the supply of parking for both the general public and for boat trailers is expected to increase (88 new parking stalls and 23 new boat trailer parking stalls).</p> <p>DEIS Section 4.1 discusses cultural, archaeological, and historic resources within the Project Area. The KBMP proposes to establish a new cultural heritage corridor with the aim to preserve and protect the most culturally significant and vulnerable sites while enhancing opportunities for the public to engage and learn about their importance. Implementation of the Project is anticipated to generate long-term benefits by preserving sensitive archaeological sites and implementing a plan to steward the sites in perpetuity.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		Thank you for your participation in the environmental review process.
Winston	Please do not change the way keauhou bay is presently used	<p>Thank you for your letter dated April 23, 2022, concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343.</p> <p>We acknowledge your comments related to the KBMP. As the steward of approximately 54 acres at Keauhou Bay, Kamehameha Schools (KS) has specific kuleana to maintain and support the management of the bay and its resources. The significant demand and utilization of the bay can and often does create congestion which leads to user conflicts along the bayfront. KS lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. Through consultation with lineal descendants and community members it was determined that doing nothing is not a viable option. Guided by KS' mission and vision, the Project aligns with the current KS Strategic Map 2025 which is a strategic planning document aimed</p>

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Comments	Commenter	Responses
		<p>to achieve the goal of developing resilient communities by stewarding the 'āina to support resilient economies, cultural landscapes, diverse learning, and career pathways. The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the KBMP process.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Petitioners</p>		
<p>Aaron Lanuza</p>	<p>This is a wonderful space for volleyball and beach time with my family</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded. Thank you for your participation in the environmental review process.</p>
<p>Aka 002</p>	<p>I love this court! would be a shame to get rid of it.... one of the very few nice beach courts on the kona side.</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP)</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>At present, KS does not have an agreement with any entity for use of the volleyball court. Further complicating the matter, a portion of the land underneath the court is within the County right-of-way and therefore outside of KS ownership. KS is committed to the continued consultation with elected officials and representatives of the Kona area to discuss how outdoor recreational activities such as volleyball can be planned in more appropriate areas.</p> <p>Thank you for your participation in the environmental review process.</p>
Alex Dullam	I play volleyball down here on the weekends and I don't want to lose something that makes me happy	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>At present, KS does not have an agreement with any entity for use of the volleyball court. Further</p>

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Comments	Commenter	Responses
		<p>complicating the matter, a portion of the land underneath the court is within the County right-of-way and therefore outside of KS ownership. KS is committed to the continued consultation with elected officials and representatives of the Kona area to discuss how outdoor recreational activities such as volleyball can be planned in more appropriate areas.</p> <p>Thank you for your participation in the environmental review process.</p>
Alexis MacLeod	I'm signing because there are not enough unspoiled places left in the world.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Amanda Nixon	Keauhou does not need and cannot handle more condos or resorts. No no no to more development on our already fragile over crowded coast.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your</p>

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Comments	Commenter	Responses
		<p>comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Ana Tuppein	<p>The ocean is a sacred place, especially keahou bay. The increase of tourism in that area will be detrimental to marine life, especially the manta rays that reside in that area.</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Ann nichols	<p>This is a terrible idea for this historic area creating traffic, congestion and ruining community character. Owner at Kanaloa at Kona.</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
ANTHONY RODRIGUES	<p>These are luxury condos. A bungalow is a single level unit. Why don't they build it at the former Keauhou Beach Hotel? Or Kona Lagoon. No major development should be allowed till the Alii Highway is installed.</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP)</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>The former Keauhou Beach Hotel (Kahaluu Ma Kai) is a different site. There are educational opportunities we want to take advantage of that were not conducive with the previous hotel structure.</p> <p>The income generated from activities at Keauhou Bay will be used to support KS' mission as well as the educational and cultural components of the Keauhou Bay Management Plan.</p> <p>Thank you for your participation in the environmental review process.</p>
Asha Keddy	I want to preserve the beauty and history for all	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Austin Llanes	Too much buildings	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Barbara Celello</p>	<p>The Keauhou Bay Area is a favorite area for locals and has been for years. The many activities that occur regularly begin and end there. Making unneeded changes would spoil its existence, not to mention robbing those who continue to honor Hawaiian legacy.</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Beverly Connelly</p>	<p>I've experienced this sacred park &amp; beach and see the history and benefit of it being easily available for locals and visitors alike. Over developing is a fine line and a new proposal of additional resort dwellings would be a tipping point for preserving access to this space. Please consider this pocket to be important enough to protect</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>

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Comments	Commenter	Responses
braxston bailey	Stop the Building!	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Brooke Morrow	No more building	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Bryan Gazau	Less is more, keep the beaches cleaner save water sacred beaches keep sacred	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		Thank you for your participation in the environmental review process.
Caleb Hoffman	Keep Hawaii's natural beauty!	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded. Thank you for your participation in the environmental review process.
Carolina Medina	Please sign. When is enough going to be ENOUGH!??若	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded. Thank you for your participation in the environmental review process.
cathy costa	This is our history and culture No desecration	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your

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Comments	Commenter	Responses
		<p>comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Christine Tucci	We vacation there	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Cindy Holton	Maintain local traditions and protect waterfront beaches!	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Darlene Daboling	Please keep Keauhou Bay the way it is. PLEASE PRESERVE. Please respect Hawaii and not give to greedy people who care not about us.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP)</p>

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Comments	Commenter	Responses
		<p>prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
David Locke	Enuf! Don't turn this place into a Joni Mitchell song.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Davin Long	I really don't want it to go I love the volleyball court and another resort hell nah!	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>At present, KS does not have an agreement with any entity for use of the volleyball court. Further complicating the matter, a portion of the land underneath the court is within the County right-of-way and</p>

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Comments	Commenter	Responses
		<p>therefore outside of KS ownership. KS is committed to the continued consultation with elected officials and representatives of the Kona area to discuss how outdoor recreational activities such as volleyball can be planned in more appropriate areas.</p> <p>Thank you for your participation in the environmental review process.</p>
Debbie Hecht	Keep Keahou Bay accessible. The cess pools along the north side need to be replaced by sewers.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>We are aware of the issues related to contamination caused by cesspools in the vicinity of the bay. All new facilities associated with the Project will be serviced by sewer utilizes and treated at the He'eia Wastewater Treatment Plant.</p> <p>Thank you for your participation in the environmental review process.</p>
Deborah Heun	We have enough big resorts don't take away another bay	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou</p>

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Comments	Commenter	Responses
		<p>Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Deby Quandt	Another resort is not needed, this peaceful place is needed.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Deeson patterson	It's good	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Deni Alley	This is a sacred area and not big enough for more tourism. Respect the Āina and the folks living here. A'ole development!	<p>Mahalo for your comment in the petition concerning the</p>

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Comments	Commenter	Responses
		<p>Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Diane Neuman	This is outrageous. There are plenty of resorts already.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Edwin Gaspar	The area is Historical we dont need any more hotels let alone more people moving here and squeezing out local people native to Hawaii.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
Elisha Vierra	I want to keep keauhou bay the way it is and all it's artifacts	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>DEIS Section 4.1 discusses cultural, archaeological, and historic resources within the Project Area. Several recorded archaeological sites within the Project Area are in areas with overgrown vegetation and not easily accessible. The KBMP proposes to establish a new cultural heritage corridor with the aim to preserve and protect the most culturally significant and vulnerable sites while enhancing opportunities for the public to engage and learn about their importance. Implementation of the Project is anticipated to generate long-term benefits by preserving sensitive archaeological sites and implementing a plan to steward the sites in perpetuity.</p> <p>Thank you for your participation in the environmental review process.</p>

**Table 7.2 DEA Summary of Comments and Responses**

<b>Comments</b>	<b>Commenter</b>	<b>Responses</b>
Eliza Wille	This area does not have the infrastructure to support more development and run off into the bay will further compromise the reef and water quality.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Potential land erosion due to the implementation of the KBMP has been addressed in the Draft Environmental Impact Statement (DEIS). DEIS Section 4.5, describes stormwater runoff peak flow estimates for both existing conditions and with project implementation. At present, portions of the KS properties at Keauhou Bay are unmanaged and susceptible to runoff and erosion. The Project is expected to result in long-term benefits as permanent sediment control measures and stormwater infrastructure would minimize runoff and erosion. Those strategies may include but are not limited to detaining, retaining and infiltrating runoff into the ground.</p> <p>Thank you for your participation in the environmental review process.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
Ellie Tyler	Keep Hawaii the way it is!	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Erin Hamar	My brother's and grandmother's ashes are in this bay. I go here to be with them. If they build a resort here how can I? Plus I paddled for Keauhou canoe club. Where will they paddle? I am strongly against this! No no no!!!!	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>The KBMP proposes to create a mauka / makai corridor to improve public shoreline access and to enhance the area for educational, recreational, and cultural activities. Draft Environmental Impact Statement (DEIS) Section 3.2.3 describes the Project's aim to visually and spatially consolidate the mauka and makai recreation areas to create an expanded shoreline park. Implementation of</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>the plan is expected to enhance opportunities for ocean recreation and cultural use of the shoreline. The canoe club will remain in operation at its existing position. Thank you for your participation in the environmental review process.</p>
<p>Esther Quam</p>	<p>This bay needs to be left just the way it is. It's one of our only playing grounds left for the local people of and our keikis to enjoyed without all the mainland humbug , and crowds.. There going to destroy the ocean. Leave it be!!!!</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statues Chapter 343. Your comments have been administratively recorded. Thank you for your participation in the environmental review process.</p>
<p>Evan Curry</p>	<p>I have lived here all my Life we can not let our island get over run with this kind of stuff. How about tear down the condos and build more volleyball courts</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statues Chapter 343. Your comments have been administratively recorded. Thank you for your participation in the environmental review process.</p>
<p>Francis Hogue</p>	<p>Historical! Leave it alone</p>	<p>Mahalo for your comment in the petition concerning the</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>DEIS Section 4.1 discusses cultural, archaeological, and historic resources within the Project Area. The KBMP proposes to establish a new cultural heritage corridor with the aim to preserve and protect the most culturally significant and vulnerable sites while enhancing opportunities for the public to engage and learn about their importance. Implementation of the Project is anticipated to generate long-term benefits by preserving sensitive archaeological sites and implementing a plan to steward the sites in perpetuity.</p> <p>Thank you for your participation in the environmental review process.</p>
Frida Marie	I NEED TO AND THATS NOT OKAY TO DO !	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Gabrielle Provencher</p>	<p>This is a sacred place for the Hawaiian people that should be left alone and not developed.</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>GinnyJo Minamishin</p>	<p>This is King Kamehameha the third birth place and hold significant historical and sacred mana to the island of Hawaii.</p> <p>There is no more need to take and replace what is already there !!!! This piece of Hawaii, that still is used by keauhou canoe club and and an area for little family gathering, such as Picnics and paddle boarding. Not to mention the boat ramp for fisherman and fishing grounds around the area. This place is well taken care of by the locals of the big island and hold significant Hawaiian history!!!</p> <p>We don't need any more hotels, condos, homes on this beach front property. It is a respectable play ground for our children and adults as well from land to water.</p> <p>Please save hawaii and our sacred land and history from being over built for greed and control.</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>DEIS Section 4.1 discusses cultural, archaeological, and historic resources within the Project Area. The KBMP proposes to establish a new cultural heritage corridor with the aim to preserve and protect the most culturally significant and vulnerable sites while enhancing</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>opportunities for the public to engage and learn about their importance. Implementation of the Project is anticipated to generate long-term benefits by preserving sensitive archaeological sites and implementing a plan to steward the sites in perpetuity.</p> <p>Thank you for your participation in the environmental review process.</p>
gretel pate	This is sacred land. Get yer paws off it!	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Heather Harvey	This is my favorite local spot to still swim, boat, and surf. If we over populate it, it will kill off the local wildlife and human life. Please stop killing the coral <input type="checkbox"/> and livelihood. It's the first place I ever played volleyball on the island. Its where I go to meditate and swim in clean water. Away from the tourist	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
Heather Johnson	Ua mau, ke ea o ka aina, i ka pono, o Hawaii The life of the land is perpetuated in righteous.	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded. Thank you for your participation in the environmental review process.
Jacque Green	I am handicapped and elderly.. I can't get in the water where there is waves. This is one of the few places I can go!♥	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded. The KBMP proposes to create a mauka / makai corridor to improve public shoreline access and to enhance the area for educational, recreational, and cultural activities. Draft Environmental Impact Statement (DEIS) Section 3.2.3 describes the Project's aim to visually and spatially consolidate the mauka and makai recreation areas to create an expanded shoreline park. Implementation of

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>the plan is expected to enhance opportunities for ocean recreation and cultural use of the shoreline.</p> <p>Thank you for your participation in the environmental review process.</p>
Janie Workman	Keeping ancient Hawaiian culture is important!	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Janis Prinslow	I'm signing because there aren't any places left on the Kona side of the island that aren't overcrowded!	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Jasmin McCracken	Just wrong... no. please don't pave paradise to put up a parking lot. There is PLENTY of places for tourists to stay already. Too many.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Jasper Felipe	volleyball	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>At present, KS does not have an agreement with any entity for use of the volleyball court. Further complicating the matter, a portion of the land underneath the court is within the County right-of-way and therefore outside of KS ownership. KS is committed to the continued consultation with elected officials and representatives of the Kona area to discuss how outdoor recreational activities such as volleyball can be planned in more appropriate areas.</p> <p>Thank you for your participation in the environmental review process.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
Jeanne Alford	We need to protect and embrace these sacred, neighborhood places and not allow big money and commercial developments to come in and destroy them.	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded. Thank you for your participation in the environmental review process.
Jeanne Roberts	Kam Schools Capital has a monopoly on bays and access in Keauhou and a pattern of taking away access from the community. Look at what they have done to Heeia Bay!	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded. Access to the bay will not be impeded by the implementation of the Project. The KBMP will enhance access with improvements to pedestrian networks, wayfinding, and parking. Thank you for your participation in the environmental review process.
jennifer Murphioka	I'm signing this because Keauhou Bay is important to my family. We spend so much of our time here. It is our home away from home. The beach is perfect to take out the paddle board and swim with our daughter. I paddle for Keauhou Canoe Club whose hālau is here. I do not want to see beach	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>"bungalows" where our hālau currently stands. We do not need anymore oceanfront beach bungalows - visitors have plenty of other beachfront options, if that is what they are looking for. Do not build another resort. There is one right around the corner.</p>	<p>Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Chapter 3 of the Draft Environmental Impact Statement provides a detailed description of the Project. The location for the proposed boutique resort is mauka of Old Kona Road. The canoe hālau is viewed as an important community and cultural resources and will remain in its existing location.</p> <p>Thank you for your participation in the environmental review process.</p>
Jordan Bever	Resorts are gross	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Jordan Shack	No more resorts at Keauhou. Save the bay	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Joseph Jardin	I've paddle there for so long you can't just take that down	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Joshua Pickering	Keep Keahou Bay natural!	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Julia Donath	No more unjust, unsustainable development that displaces the local community, negatively alters the land, erases Native Hawaiian culture, &	Mahalo for your comment in the petition concerning the

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Comments	Commenter	Responses
	<p>threatens the island’s environmental security. I don’t know how anyone who sees the pervasive displacement &amp; homelessness across Hawaii on a daily basis could propose more investment in unsustainable infrastructure for visitors, and this proposal represents a stifling rejection of truth.</p> <p>Before more development for visitors, meet the needs of the local community. If you can invest this much money in unnecessary development, then I don’t believe it when it’s said that there’s “not enough money” to meet the basic needs of people who live here, &amp; combat what is probably the most significant &amp; interconnected threat we face: climate change.</p> <p>I don’t know where visitors will “visit” when there is no longer land to sustain life, because it was exploited, disrespected, &amp; destroyed by a vision of development that prioritizes profit over life.</p>	<p>Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai’i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Julie Steinbach	I love this island because it’s not over crowded and all resorts. We love it the way it is.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai’i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Kandie Kato	I love Hawaii, not developing every square inch	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai’i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		Thank you for your participation in the environmental review process.
Kathy Roney	In my lifetime, I've witnessed Oahu go from a peaceful tropical oasis to an overpopulated tourist site. Allowing this development will take away why many of us chose to live on Hawaii Island and at Keauhou Bay. We don't always need to cater to the tourist and greed. Malama `Aina!	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded. Thank you for your participation in the environmental review process.
Katie Lynn	Keauhou Bay is a precious and sacred place. It deserves to stay that way. The focus should be on housing solutions for residents (in appropriate areas) and land stewardship. Not more resorts destroying the natural and historical sites.	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded. The provision of housing on the KS owned lands at Keauhou Bay was considered as an alternative and discussed in DEIS Section 6.3. Based on the analysis of alternatives, the Housing Alternative would fail to meet the objectives of the Project. Under this scenario, the KS lands would improve income

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>generation opportunities to support area programming, however, a residential development may result in adverse impacts to the surrounding environment, particularly with regards to view planes, infrastructure, traffic, recreational activities, and open space. Additionally, the provision of housing would not be cost effective for KS to develop at this location and could be cost prohibitive for local buyers.</p> <p>Thank you for your participation in the environmental review process.</p>
Katie McKillop	Please keep Keauhou just as it is. This is a historical area that needs to be kept natural with care. Aloha.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Kaulahoolai Pilago	The resort on Keahou point is way more than enough. The entire Alii drive is hotels, resorts, condos, vacation rentals, and multimillion dollar properties. Why must our community always conform to the greedy desires for people to exploit Hawaii. When you build stuff like this, the area that we all grew up in	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP)</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	and have cherished memories in turns into a sad perversion of what it once was.	prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded. Thank you for your participation in the environmental review process.
Kevin Yates	As a local Born and raised on the Big island Of Hawaii in Kona town, I can remember so many because of public access being taken away from the People who live the Hawaiian ways. If they build this will only be another public access being denied to the locals of Hawaii.	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded. Thank you for your participation in the environmental review process.
Kimberly Kekina	We don't need another resort !	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded. Thank you for your participation in the environmental review process.
Kylee-Anne Kihe	I'm signing because we have so much resorts! Not only do we have so much resorts but there is so much history behind keahou and putting a resort there	Mahalo for your comment in the petition concerning the Environmental Impact Statement

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
	<p>would just the defeat the purpose of why keahou bay is there and why it's so important</p>	<p>Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Lakin Ferris</p>	<p>We don't need another resort on this island. That's a significant tourist and local spot where plenty people go to have fun. Putting a resort there would ruin it.</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Laurie Teitelbaum</p>	<p>I love the place to congratulate with friends. I feel that we need to keep it available for all of hawaiian residents to congregate. Please keep it for our children.</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>

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Comments	Commenter	Responses
LaVerne Curry	We have enough developments. We need places for our local residents to gather and enjoy our Aina. We need to keep the volleyball courts and the canoe hale for locals.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>At present, KS does not have an agreement with any entity for use of the volleyball court. Further complicating the matter, a portion of the land underneath the court is within the County right-of-way and therefore outside of KS ownership. KS is committed to the continued consultation with elected officials and representatives of the Kona area to discuss how outdoor recreational activities such as volleyball can be planned in more appropriate areas.</p> <p>Thank you for your participation in the environmental review process.</p>
Leslie Rae Schmitz	This development is completely unnecessary and will do no good only harm. The existing hotel Outrigger sits half empty and the Keauhou Shopping center commercial space is mostly vacant. The traffic corridor will be hugely disruptive. This cannot be built.	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your

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Comments	Commenter	Responses
		<p>comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Linda Mutch	<p>Appalling plan for this land. We have more than enough resort developments. Please show respect and keep Keauhou Bay sacred and peaceful.</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Linda` Ronske	<p>Save this beautiful historic site. Build your bungalows somewhere else. This public site will then become off limits to everyone but the rich living there.</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Lori Watson	<p>Save the historical areas before it's gone.</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP)</p>

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Comments	Commenter	Responses
		<p>prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Luis Pagan	Kolohe	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Maile Silva	This place is an amazing place that we love and don't want it gone	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Makanani Kaaua	Enough development for visitors use.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement</p>

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Comments	Commenter	Responses
		<p>Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Marquesa Calderon	Respect the locals!!	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Mary E Wilson	Development of these beautiful bays and coastlines has to stop! It's ruining the ecosystems of the ocean	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>

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Comments	Commenter	Responses
Matthew Idom	There's no need for a resort, it's only greed.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Matthew Kerr	Why ruin a good thing?	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Michele Vinz	We need to preserve more land on the islands.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		Thank you for your participation in the environmental review process.
Mike Dennis	I love Keauhou Bay and raised my kids there. I have paddled there for almost 30 years. It's a treasure.	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded. Thank you for your participation in the environmental review process.
Molly Smyth	We don't even have enough staffing on the island to accommodate another resort. Take a look around at all the help wanted signs and vacant buildings in Kona. The last thing we need is more development.	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded. Thank you for your participation in the environmental review process.
Mystery-Lynn Freitas	Hawaii needs more HOUSING for Hawaiians before we desecrate more land to serve tourists who don't live here. We need to preserve the land and beach space and act as stewards of the land - not pave over paradise and put up more parking lots.	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your

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Comments	Commenter	Responses
		<p>comments have been administratively recorded.</p> <p>The provision of housing on the KS owned lands at Keauhou Bay was considered as an alternative and discussed in DEIS Section 6.3. Based on the analysis of alternatives, the Housing Alternative would fail to meet the objectives of the Project. Under this scenario, the KS lands would improve income generation opportunities to support area programming, however, a residential development may result in adverse impacts to the surrounding environment, particularly with regards to view planes, infrastructure, traffic, recreational activities, and open space. Additionally, the provision of housing would not be cost effective for KS to develop at this location and could be cost prohibitive for local buyers.</p> <p>Thank you for your participation in the environmental review process.</p>
nathan percifield	Keauhou Bay i sacred	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Pamela Welden	<p>There is already an Outrigger Resort there. It needs renovation and reopening of its restaurant venues - that's plenty for that small little bay.</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Patti Donohue	<p>I want to save this area from further development.</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Paul Dagdag	<p>30 + resident of the Kealakekua/Keauhou ahupua'a and have witnessed the influx of traffic on both Alii and Hwy 19 roads. Adding another resort will only add more congestion to a problem of poor infrastructure.</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP)</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>We understand that parking and circulation has been challenging in residential neighborhoods surrounding Keauhou Bay. Street capacity and traffic circulation was taken into consideration during the development of alternatives. The Project involves multiple design elements to improve overall circulation and alleviate congestion. The Project proposes to improve the Old Kona Road to support multi-modal transportation options while also providing a linkage across the two sides of the Bay. The roadway is intended to be pedestrian orientated to serve as a key walking route for residents and resort guests to access the dining, commercial, and recreational activities throughout the area.</p> <p>The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr &amp; Peers to identify and assess existing and future mobility option</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>as well as potential traffic impacts generated by the Project</p> <p>Thank you for your participation in the environmental review process.</p>
Paul Dagdag	The place is already crowded. We need better roads and alternative routes before more development is built!	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Paula Goleta	I'm an outrigger paddler and enjoy the sport. This club lent us canoes to race in Hawaii.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Rachel Curnel Struempf	Save our beach! Please don't develop it!	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP)</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Rhys Ward	I grew up there and don't want to see it change in a negative way.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Robin Akau	I believe there should be recreational spaces in our community.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>The KBMP proposes to create a mauka / makai corridor to improve public shoreline access and to enhance the area for educational, recreational, and cultural activities. Draft Environmental Impact</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>Statement (DEIS) Section 3.2.3 describes the Project’s aim to visually and spatially consolidate the mauka and makai recreation areas to create an expanded shoreline park. Implementation of the plan is expected to enhance opportunities for ocean recreation and cultural use of the shoreline.</p> <p>Thank you for your participation in the environmental review process.</p>
Rochelle Morais	This is a beautiful bay that should be protected and not be overrun by a resort	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai‘i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Sabrauna Hedenberg	KEEP HAWAII IN HAWAIIAN HANDS	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai‘i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		Thank you for your participation in the environmental review process.
Sally Rankin	When is enough, enough!?! Kamehameha Schools claims to be ashamed of how they have managed the `aina at the bay, but this plan clearly proves they have no shame when it comes to properties they consider financially underachieving, no matter the cost.	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded. Thank you for your participation in the environmental review process.
Sarah Kamanu	Keauhou bay already has a perfect balance of visitors and locals. There is no space for yet another resort of any kind to be built! The harbor is small, it is already maxed out on tourists, boats and humans	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded. Thank you for your participation in the environmental review process.
sharon willeford	A sacred place for the local people!!! Don't OverDevilop Kona !!!!	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Sheila Braithwaite	<p>Because I have lived on a barrier island that was ridiculously over built causing all kinds of traffic issues and environmental trauma to the National Park it abutted. Spaces like this are so important for residents and guests. Celebrate it...don't destroy it</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
siobhan radway	WTF!	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Stephen Dossey	Aloha aina keep Kona country	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP)</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
<p>Susan Girouard</p>	<p>I'm concerned about the increased traffic on lower Kam III, and what will be done to protect existing residents from the increased noise.</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>We understand that parking and circulation has been challenging in residential neighborhoods surrounding Keauhou Bay. Street capacity and traffic circulation was taken into consideration during the development of alternatives. The Project involves multiple design elements to improve overall circulation and alleviate congestion. The Project proposes to improve the Old Kona Road to support multi-modal transportation options while also providing a linkage across the two sides of the Bay. The roadway is intended to be pedestrian orientated to serve as a key walking route for residents and resort</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>guests to access the dining, commercial, and recreational activities throughout the area.</p> <p>The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr &amp; Peers to identify and assess existing and future mobility option as well as potential traffic impacts generated by the Project (<i>Appendix E</i>).The MAR found that the implementation of the Project would not result in significant traffic impacts.</p> <p>An Acoustic Study was conducted for the DEIS by Y. Ebisu and Associates (<i>Appendix F</i>). Overall, the results of the Noise Assessment indicate that no significant increases in noise levels are predicted to occur as a result of traffic following the full buildout of the Project. Short-term noise impacts associated with Project construction activities may occur during the earthwork and excavation phases, when site preparation work and/or roadway construction occur. In addition to the anticipated application of State Department of Health noise permit</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>requirements and procedures during noisy construction activities, the use of quieted portable engine generators and diesel equipment will be specified for use within 500 ft of noise sensitive properties. Heavy truck and equipment staging areas will also be located at areas which are at least 500 ft from noise sensitive properties. For further discussion, please refer to section 4.13 of the DEIS.</p> <p>Thank you for your participation in the environmental review process.</p>
Susie Cysewski	That area needs to stay natural. Enough condos and shops already in Keauhou. Use the money to help Naive Hawaiians build homes.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Teah Van Bergen	This land belongs to the people	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Teddy Alejandro	Stop corporations.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Thomas Owens	Leave our Bay alone!!!	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Thomas Pinkert	Let's get more affordable housing for local people instead.	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP)</p>

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>The provision of housing on the KS owned lands at Keauhou Bay was considered as an alternative and discussed in DEIS Section 6.3. Based on the analysis of alternatives, the Housing Alternative would fail to meet the objectives of the Project. Under this scenario, the KS lands would improve income generation opportunities to support area programming, however, a residential development may result in adverse impacts to the surrounding environment, particularly with regards to view planes, infrastructure, traffic, recreational activities, and open space. Additionally, the provision of housing would not be cost effective for KS to develop at this location and could be cost prohibitive for local buyers.</p> <p>Thank you for your participation in the environmental review process.</p>
Trina Alapai	Enough is enough!!! Listen to the Hawaiian people and do right by them. Respect. 🙌	Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP)

**Table 7.2 DEA Summary of Comments and Responses**

Comments	Commenter	Responses
		<p>prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Tyler Wood	<p>My brother and I grew up there, I still come back when I go see my family. It's been through (and is going through) enough tourist abuse. Leave it be.</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Valerie Vaughan	<p>Not every beautiful bay needs a resort ❤️</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Vickie Pruitt	<p>We already have way too many resorts on this island, This island will end up just like the rest, overcrowded with tourists.</p>	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement</p>

**Table 7.2 DEA Summary of Comments and Responses**

<b>Comments</b>	<b>Commenter</b>	<b>Responses</b>
		<p>Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>
Vivianmalia Faagata	Ancestral connection	<p>Mahalo for your comment in the petition concerning the Environmental Impact Statement Preparation Notice for the Keauhou Bay Management Plan (KBMP) prepared pursuant to Hawai'i Revised Statutes Chapter 343. Your comments have been administratively recorded.</p> <p>Thank you for your participation in the environmental review process.</p>



Appendix C

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# **DEIS Comment Response Matrix**



## Comment Responses by Subject

Archaeological and Cultural Resources.....	1
Influx of Visitors During IRONMAN .....	74
Congestion in the Bay .....	76
Evacuation Challenges .....	80
Boat Trailer Parking .....	82
Opposing Old Kona Road.....	85
Infrastructure and Utilities.....	86
Landfills .....	186
Wastewater.....	194
Wildfire Management .....	201
Water Management .....	203
Natural and Manmade Hazards.....	207
Air Quality.....	209
ADA.....	214
Sea-Level Rise.....	216
Heat (Temperature) Increase .....	220
Flood Hazard .....	221
Beach Restoration .....	221
Effects on Nearby Businesses.....	222
Retail.....	224
Socioeconomics & Environmental Justice.....	225
Affordable Housing Demand .....	233
Medical Facilities .....	235
Biological Resources.....	236
Marine Life in Bay .....	266
Noise.....	311
EIS Process.....	320
KS Mission & Purpose and Need .....	339
Land Management.....	348
Keauhou Canoe Club.....	359
Public Beach Access .....	361
Volleyball.....	363
Recreational Activities .....	367
Land Use.....	368
Suggestions.....	408
Support .....	417
Figure Resolution .....	424
No Comment .....	425

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<b>Archaeological and Cultural Resources</b>		
I really like the idea of the historical sites being cleaned up and believe this would provide a wonderful educational opportunity for the students to undertake this mission. I've heard that the KS would also restore the cave there, which I believe would be wonderful as well.	Jessica Kuzmier	As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.
Kamehameha Schools EIS needs to be rejected because Kamehameha Schools has not contacted hundreds of Hawaiian people, especially descendants from Keauhou Bay and spoken with them about how they would feel about their Endowed land that was given to Kamehameha Schools as trustees by Princess Bernice Pauahi Bishop for the Hawaiian people to benefit from and under Cultural Impact Law these people MUST BE CONTACTED. Here is a video by Kupuna Kumy Lily Kong and she states that her and her mother are against development. She was born in Keauhou Bay and SHE has the right to be heard	Rebecca Melendez	<p>In 2010, Kamehameha Schools initiated consultation with lineal descendants of Keauhou and Kahalu'u, which consultation continues today. During an early consultation meeting in the Fall of 2016, 'ohana of Keauhou and Kahalu'u shared concerns about long-standing issues in the area. They cited congestion, limited access, and the impact of inappropriate commercial and recreational activities that have eroded the bay's historical and cultural identity. Please refer to Chapter 7 of the FEIS, detailing the level of consultation conducted with lineal descendants as well as other stakeholder groups.</p> <p>Input from lineal descendants and the community guided the formation of the Keauhou Bay Management Plan (KBMP) and identification of the plan's management strategies. Multiple listening sessions and project updates, including presentations of concepts, were provided throughout the planning process. Kamehameha Schools continues to be open to meeting with other lineal descendants that decide to come forward.</p> <p>Lineal descendants were notified of the publication of the KBMP Environmental Impact Statement Preparation Notice (EISPN) and Draft Environmental Impact Statement (DEIS). Lineal descendants were also provided individual copies of the Draft EIS to ensure their access to the document and ability to review at their convenience.</p>
I'm also worried about what your develop plan will do to the special place where there are some old ruins of old Hawaiian settlement and shoreline on the south/end tip of the bay, and also the small beach area, and end of Slide. Also, the King's Birthplace area. I believe injecting this amount of	Paul Koenigshofer	As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>people into the Bay is going to be too harmful and life-changing for what it is now. I believe it will ruin this sacred and beautiful Bay, and change our neighborhood drastically forever</p>		<p>honor and perpetuate the wahi pana for present and future generations.</p> <p>Kamehameha Schools recognizes that Keauhou Bay and its surrounding areas have long been used for ceremonial practices, voyaging traditions, and community gatherings, and serves as a hub of activity for cultural and community engagement, with traditions rooted in Hawaiian history. The KBMP aligns with the legacy of Kamehameha III, Kauikeaouli, by prioritizing the preservation of cultural sites and fostering place-based education. The integration of cultural preservation with a low impact development approach aims to restore and protect the bay while offering educational opportunities for the Native Hawaiian community and the public.</p> <p>The KBMP implements a robust set of mitigation strategies designed to preserve significant cultural properties while allowing for responsible development. The mitigation measures outlined in Section 4.1 of the EIS reflect the comprehensive archaeological research, data recovery efforts, and ongoing preservation commitments that have shaped the Project.</p> <p>As part of the KBMP, Kamehameha Schools has identified and integrated significant cultural properties, such as those you've mentioned, into the Project's preservation plans. These sites, including those near the birth site of Kauikeaouli, Ho'okūkū Pond, and the Mo'ikeha Cave, are being honored and protected through measures like buffer zones, fencing, invasive species removal, monitoring, and interpretive signage. These measures aim to safeguard these areas from any damage caused by construction or increased access. Kamehameha Schools is committed to ensuring that these sacred sites remain protected, and any construction will be carefully managed to avoid harm to the landscape.</p> <p>Kamehameha Schools is committed to a project approach that starts with honoring the cultural landscapes, natural systems, mo'olelo (stories) and community. The KBMP is focused on enhancing cultural and ecological integrity while ensuring that the area remains accessible for future generations. This includes the</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		continued restoration of cultural landscapes, which will help preserve the Bay's environment, educate the public about the historic legacy of the bay, and improve connection to place.
Justify putting a road through Kamehameha III's birth site. Specify how cultural and historic preservation will be accomplished.	Cory (no last name provided)	<p>The KBMP calls for the rehabilitation of the Old Kona Road, which historically connected the north and south ends of the bay. This existing road, currently unused, runs along the plateau mauka of the birth site of Kamehameha III, Kauikeaouli—meaning no new road will be constructed through the birth site.</p> <p>Restoring this road is a key component of the KBMP, ensuring responsible public access while directing traffic away from the bayfront to preserve the bay's cultural, ecological, and educational significance. This road will also facilitate emergency evacuation from the area in times of tsunami events.</p> <p>Kamehameha Schools understands that this site is not just a historic landmark; it is an integral part of our Hawaiian cultural landscape, and Kamehameha Schools will treat the lands KS stewards with the utmost respect. To minimize any potential negative impacts on this sacred area, the KBMP includes several key measures aimed at protecting and preserving the site's historical, cultural, and environmental integrity.</p> <p>Several key historic properties, including Kauikeaouli's birthstone, Kaopa Pond, Ho'okūkū Pond, and Mo'ikeha Cave, have been integrated into preservation plans already approved by the State Historic Preservation Division (SHPD).</p> <p>Preservation will involve the establishment of buffer zones, fencing, and interpretive signage to protect these sites from unintended impacts during construction and public use. Restoration efforts will continue to prioritize the cultural and ecological integrity of the landscape.</p> <p>Future opportunities with Kamehameha Schools community partners include interpretation, educational learning, and appropriate cultural use inclusive of, but not limited to, restoring cultural landscapes, caring for the ponds, and potentially</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>reforesting with native coastal dry forest plants—all supporting the ecological and cultural integrity of the area.</p> <p>The design for Old Kona Road is planned to minimize disruption to the Kauikeaouli birth site and surrounding areas by diverting traffic up and away from the bayfront. The road is also designed with landscape integration in mind, including vegetative buffers with native plants to maintain the aesthetic and cultural harmony of the area.</p>
<p>Adding upscale tourist accommodations to a small area of great historical and cultural importance, the birthplace of King Kamehameha III, is a shocking affront, disrespectful to Hawaiians, and a blatant grab for yet more money at the expense of the environment, local residents, and those who sincerely care about history</p>	Joyce Barbarich	<p>As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.</p> <p>The birth site of Kauikeaouli, holds immense cultural and historical significance. Kamehameha Schools is transforming nearby commercial buildings into cultural and educational spaces to better honor the birth site and emphasize the area's cultural significance. All improvements to the surrounding area will be designed with the utmost respect for its significance, informed by ongoing consultations with Hawaiian cultural practitioners and community leaders.</p> <p>Kamehameha Schools recognizes the challenge of balancing the preservation of cultural heritage with the demands of modern land use. New accommodations in the area are intended to foster a sustainable, culturally sensitive visitor model that supports the local community while preserving the site's significance. The low-impact lodging will be located mauka of the 'Ahu'ula cliff, above and away from the birth site.</p> <p>The Project includes specific measures to protect the birth site of Kauikeaouli, ensuring that the Project will not encroach on this historically significant site. Buffer zones, cultural monitoring during construction, and interpretive signage are all part of the strategy to preserve the area's historical integrity.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>I came to Keauhou Bay because it contained so much history of the Hawaiian people and was a quiet reserved place. The birthplace of King Kamehameha III cannot remain intact and a place of reverence when it is overrun by tourists. What about the slide? Keauhou Bay has always been a quiet place to make offerings to the great king on his birthday and other times of the year. A place to reflect on the island culture and ancestors. This is not a place for a resort overrun by 300+ tourists. Now, if you could provide me with actual readable maps. I will further give you comments.</p>	<p>Cheri Uno</p>	<p>As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.</p> <p>Kamehameha Schools recognizes that Keauhou Bay and its surrounding areas have long been used for ceremonial practices, voyaging traditions, and community gatherings—serving as a vibrant piko or center for cultural and community engagement, with deep connections to Hawaiian history and traditions. The KBMP honors the legacy of Kamehameha III, Kauikeaouli, by prioritizing the preservation of cultural sites and fostering place-based education. The approach integrates cultural preservation with responsible development, aiming to restore and protect the bay while offering educational opportunities for the Native Hawaiian community and the public.</p> <p>The mitigation measures outlined in Section 4.1 of the Environmental Impact Statement (EIS) reflect the extensive archaeological research, data recovery efforts, and ongoing preservation commitments that have shaped the Project.</p> <p>As part of the KBMP, Kamehameha Schools has identified and integrated significant cultural properties, such as those you've mentioned, into the Project's preservation plans. These sites, including those near Kauikeaouli's birth site, Ho'okūkū Pond, and the Mo'ikeha Cave, are being protected through measures like buffer zones, fencing, and interpretive signage. These measures aim to safeguard these areas from any damage caused by construction or increased access. KS is committed to ensuring the ongoing protection of these sacred sites with careful management of construction activities to prevent harm to the landscape.</p> <p>Kamehameha Schools is committed to a project approach that starts with honoring our cultural landscapes, natural systems, mo'olelo (oral histories or stories), and community. The KBMP is focused on enhancing both cultural and ecological integrity while</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>ensuring that the area remains accessible for future generations. This includes the continued restoration of cultural landscapes to preserve the bay's historic environment, along with improving public and managed access to the shoreline.</p> <p>Kamehameha Schools understands and respects the desire to keep this place as-is. However, the current state is not viable for a thriving community. The goal is to foster reverent, low-impact use and create an approach that minimizes disruption while honoring the bay's historical and cultural significance.</p> <p>The KBMP will introduce visitor accommodations in a way that preserves the quiet, reflective nature of Keauhou Bay while also offering opportunities for cultural education and engagement. Kamehameha Schools is committed to managing visitor numbers, focusing on guest experiences that prioritize cultural respect and environmental sustainability.</p> <p>Several maps are provided throughout the EIS. Please refer to Figure 3-1 for Existing Conditions Map, Figure 3-35 for Improvement Plan, and Figure 3-34 for Overall Management Plan Map.</p> <p>If you are still having difficulty accessing images within the EIS online, hard copies are available for review at the Kailua-Kona Public Library, Kamehameha Schools' Keauhou Office, and the Hawai'i State Library.</p>
<p>"Integrity of Natural and Cultural Resources are Threatened"                      "Cultural resources include the tangible and intangible places and landscapes that our kūpuna once lived, worked, played, and passed. For Native Hawaiians, these places provide a spiritual connection to the practices and knowledge of their kūpuna (ancestors/elders) and continue to contribute to a sense of identity and well-being..." It makes no sense to increase commercial development specifically intended to be marketed for high-end tourism in order for this place to provide spiritual connection, unless one is worshipping the almighty dollar. It is baffling at best</p>	<p>Janet Matlock</p>	<p>As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.</p> <p>For Native Hawaiians, these places are not just historical sites, but living, spiritual spaces that continue to provide a sense of identity and well-being.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>that Kamehameha Schools sees this sacred wahi pana first and foremost as a source of income. KS's website states the current endowment is \$14.6 Billion and the investment portfolio is reported at \$9.6 Billion, with the smallest portion of that portfolio being real assets. (see attached file) How much of a rounding error would the Keauhou Bay proposed development be? And at what intangible price to the 'āina? During the April 2022 talk story, one participant asked, "...If the intent is to increase kama'āna and kupu'āina access, why is this being accomplished by putting in hotel rooms and fine dining? What are financial metrics to meet successful mission at Keauhou Bay. Is it the same for all properties. Could bungalows at another KS owned site be used to provide financial returns needed." The response was, "KS's objective is to steward the land in perpetuity. There are no existing revenue generating uses at Bay to fund the needed stewardship. We don't want to drain on other endowment funds set aside for education. Acceptable rate of returns have been studies." (sic) So: KS holds a \$14.6 Billion endowment with a \$9.6 Billion investment portfolio, yet believes it does not have enough money to fund the proposed "educational centers" (and additional commercial developments) proposed for Keauhou Bay? This does not make sense. If I had control of this endowment, I would be building more schools and educating more Hawaiian keiki, not causing environmental degradation in order to develop yet another high-end "bungalow" resort. KS already owns land leased for multiple resort properties, including one on Keauhou Bay that seems to be "under-performing." Given KSBE's track record with hotels in this ahupua'a, perhaps caretaking the one already on-site might be a better approach? I would like to close by referencing a submission contained in Appendix B, EISPN Comment Letters, by Alysia Fischer (KS's response was boilerplate): "As an archaeologist who worked on site in Keauhou Bay for multiple impact assessment and tsunami mitigation projects, I am vehemently opposed to any development that would add</p>		<p>Kamehameha Schools is committed to a project approach that starts with honoring our cultural landscapes, natural systems, mo'olelo (oral histories or stories), and community. The KBMP is focused on enhancing both cultural and ecological integrity while ensuring that the area remains accessible for future generations. This includes the continued restoration of cultural landscapes to preserve the bay's historic environment, along with improving public and managed access to the shoreline.</p> <p>Kamehameha Schools understands and respects the desire to keep this place as-is. However, the current state is not viable for a thriving community. The goal is to foster reverent, low-impact use and create an approach that minimizes disruption while honoring the bay's historical and cultural significance.</p> <p>The KBMP will introduce visitor accommodations in a way that preserves the quiet, reflective nature of Keauhou Bay while also offering opportunities for cultural education and engagement. Kamehameha Schools is committed to managing visitor numbers, focusing on guest experiences that prioritize cultural respect and environmental sustainability.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>more commercial or residential impact to the area. Along with the uncontrolled sea level rising, any further development would negatively impact the invaluable historical and cultural resources of the area. Kamehameha Schools, the county, and the state can do better with "fundraising" for education and the preservation of this area instead of hiding it within the guise of obtaining the funds through further "for profit" development. Preservation and improvement projects are always welcome and encouraged, but it shouldn't come at the high cost of changing the physical and cultural landscape to this extent." I completely agree. It is simply not fathomable that KS cannot allocate funds to accomplish appropriate stewardship goals without bulldozing, paving, and commercializing via exclusive tourism this fragile and already-impacted little bay.</p>		
<p>2. The Plan quotes Dr. Konia Freitas, the "noted Native Hawaiian scholar from the Kamakakūokalani Center for Hawaiian Studies, [who] explains spatial legitimacy as a need to respond and challenge certain assumptions that Native Hawaiian values cannot be authenticated in the contemporary urban form. The persistence of these assumptions 'bolsters the colonial construct of indigenous life as incompatible with modernity and cedes the urban realm as a perpetually colonized space' (Koh and Freitas, 2018). Dr. Freitas postulates that planning for places that are inclusive of Native Hawaiian perspectives, in response to these questionable assumptions, must begin through an inclusive framework that goes beyond an aesthetic response but seeks to be 'generative of social, economic, and political meaning.' This KBMP also aims to purposefully pursue the 'Āina Aloha Economic Futures Declaration (AAEF) with a specific focus to 'assert collective kuleana to restore degraded environments, sustainably managed human-occupied spaces, and protect the vibrancy of intact ecosystems.'" (pg. 2-4) It is admirable that KS seeks to incorporate Hawaiian perspectives and kuleana in management of its spaces, but—frankly—nothing seems to</p>	<p>Peter Matlock</p>	<p>The KBMP proposes low-impact lodging that reflects Kamehameha Schools' commitment to natural and cultural resource stewardship and sustainable tourism. Rather than developing a large resort complex, as would be allowed under current resort zoning, the project is intentionally designed to limit its physical footprint and minimize disturbance to the land. This responsible development approach seeks to honor the cultural significance of Keauhou, preserve its natural and historical resources, and support a vision of tourism that is deeply rooted in place and community.</p> <p>The lodging is not being created for the typical luxury traveler, but rather for visitors who value meaningful, educational, and culturally respectful experiences. In alignment with the values of Kamehameha Schools, the project prioritizes sustainability over profit and is seen as a key component in a broader sustainable tourism model. Importantly, revenue generated by the lodging is necessary to help fund the long-term management, protection, and stewardship of the broader Keauhou property and its significant cultural resources.</p> <p>Kamehameha Schools will select an operator for the lodging who aligns with its mission and vision for Keauhou, ensuring that operations remain consistent with the institution's values.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
exude colonialism more than high-end luxury hotels and resort retail, and it is difficult to understand how more development, run-off, and pressure on already-stressed Keauhou Bay will "protect the vibrancy of intact ecosystems."		Ultimately, the goal is not to maximize development, but to create a thoughtful, sustainable approach that supports both the land and the well-being of the Native Hawaiian community for generations to come.
3. The Plan asserts "Many consulted parties described commercial activities at the bayfront as incompatible with and disrespectful to the significant cultural landmark. The abundant commercial activity at the bayfront area has also caused a perception of exclusivity that some feel lacks true inclusivity of Native Hawaiian and kama'āina residents to the area. Long-time Keauhou residents express the sentiment that the bayfront is too commercialized and the feeling expressed is that many Native Hawaiian families are no longer welcomed. The KBMP is a reinvestment and application of key foundational principles and values that promote an inclusive cultural/community space at Keauhou Bay." (pg. 2-9) If we understand correctly, KS acknowledges that Keauhou Bay is currently too commercial, and then asks us to accept that its solution to this is yet MORE commercial activity. This is self-contradictory.	Peter Matlock	<p>The KBMP is designed to reorganize the uses and activities within the bay to better reflect the cultural significance of the area and to support a more harmonious relationship between users, place, and purpose. Central to this reorganization is the concept of directing new growth to appropriate areas while preserving others, ensuring that future development does not come at the expense of cultural integrity or environmental health. To resolve long-standing conflicts between incompatible uses, the KBMP proposes relocating certain commercial operations, particularly those that are currently situated near sensitive cultural sites, to more suitable areas above the 'Ahu'ula cliff and along Kaleiopapa Street. By moving these uses away from the bayfront and heritage zones, the plan protects sacred spaces and allows for cultural practices to thrive without interference.</p> <p>At the heart of the KBMP is the designation of a cultural heritage area that will serve as the piko, or spiritual and cultural center, for cultural and educational activities. This area honors the legacy of Hawaiian royalty and the historical importance of Keauhou Bay, and it is intended to be a gathering place where traditions can be celebrated and passed down. In shifting the bay's focus toward its cultural heritage, the plan aims to reestablish Keauhou as a place of learning, respect, and connection. By making space for Native Hawaiian practices and fostering a welcoming environment for kama'āina, the KBMP creates a foundation for healing, inclusion, and long-term stewardship of the bay.</p>
I am unequivocally against any resort development in Keauhou Bay. Keauhou Bay should not be viewed as a profit center for Kamehameha Schools but a historic and sacred place to be respected and protected. Overrunning sacred sites with tourists just to make money is not pono, it is not aloha.	Paul-Richard McCullough	The KBMP proposes low-impact lodging that reflects Kamehameha Schools' commitment to natural and cultural resource stewardship and sustainable tourism. The development approach seeks to honor the cultural significance of Keauhou, preserve its natural and historical resources, and support a vision of tourism that is deeply rooted in place and community.

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.
<p>I am disappointed that the restoration of the Holua was not included in your plan. To respond, I've hand drawn a 3.5 foot by 6.5 foot map for a Holua Cultural Park that I can envision (jpeg file attached). I also made a brief video to clearly explain the Holua Cultural Park map. Here is a link to my video: <a href="https://youtu.be/3B_MiBFyMcE">https://youtu.be/3B_MiBFyMcE</a> My wife and I have owned a home in Keauhou since 2004. We were married at the Keauhou hotel (when it was the Sheraton) in 2009. We are raising our two young children here in Keauhou, and our family benefits daily from the many special features of this place. I have reviewed the Keauhou Bay Conceptual Plan. I am pleased that commercial development is being confined to the cliff top (proposed resort area) and south end of the bay. The inclusion of the Heritage Center, restoration of anchialine ponds and foot pathways by the Mo'ikeha cave are excellent. The proposed additions of quality picnic &amp; grill areas to the north end of the Bay will be enjoyed by locals and visitors. Seeing the Keauhou Canoe Club incorporated into the plan was also a relief.</p> <p>Restore and rebuild the holua (North). We often walk with our children, neighbors, and visitors and point out to them the magnificent Royal Holua. I cannot help but imagine the intense speeds attained descending the slide and admire the bravery of those who participated in the sport. Equally impressive is the amount of resources and social coordination needed by the Hawaiian community here at Keauhou to build the hole. The Royal Holua should be restored as completely as possible, and should once again be a place for people to practice the sport and for spectators to enjoy it. The proposed redevelopment of this area</p>	Michael Herbert	<p>Mahalo for sharing your suggestions and recommendations for the Hōlua slide at Keauhou Bay. Although the Project does not have specific plans to restore Kaneaka Hōlua slide at present, the alignment of the slide corridor is being preserved as open space for potential future educational and cultural uses. Your video and images have been recorded and shared with Kamehameha Schools' cultural resource division.</p> <p>Kamehameha Schools recognizes the significance of this place and is open to further consultation with 'ohana such as yours to guide future actions that honor its legacy. Kamehameha Schools welcomes recommendations on meaningful ways to care for and recognize the Hōlua slide.</p> <p>As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>presents a once-in-a-generation opportunity to make bold moves to reclaim this magnificent feature and revive traditions surrounding holua sled racing. Keauhou Bay could become the epicenter for the revival of the Holua. I urge KS to take advantage of the opportunity and act more fully on the vision to restore this area by bringing back the Royal Holua. I have a clear concept for a Holua Cultural Park. I attached a picture of a hand-drawn map and have made a short video explaining the map. Here again is a link to my brief Holua Cultural Park video:  <a href="https://youtu.be/3B_MiBFyMcE">https://youtu.be/3B_MiBFyMcE</a></p>		
<p>I believe the portion of our property that the house was built on was actually a he'e'au. If this is true, I see nothing in your plans for this.</p>	<p>Booey Hodgins Garcia</p>	<p>The landscape around Keauhou Bay has been substantially altered due to changes in land use and development over time, leading to the loss of many archaeological sites previously documented in the area. The Cultural Impact Assessment (Appendix H) provides a good faith effort to record archaeological sites known historically, although the specific circumstances resulting in their destruction or damage are often unknown. Additionally, inadequate historical record keeping has complicated efforts to pinpoint exact locations of certain culturally significant sites, such as historic Heiau, whose precise location remains uncertain and has varied in historical accounts, as summarized in Table 7 of the assessment.</p> <p>An Archaeological Reconnaissance Survey (ARS) and Site Condition Update conducted by Haun &amp; Associates in May 2022, included in Appendix I, reviewed existing archaeological and historical documents related to the Project Area and its surroundings. Haun &amp; Associates revisited the area to relocate previously recorded sites, assess their current condition, identify potential natural or anthropogenic threats, and document newly discovered sites for significance evaluation and appropriate treatment, such as preservation or data recovery. A comprehensive summary of these findings from the ARS is detailed in section 4.1 of the Environmental Impact Statement (EIS).</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Keauhou bay should be preserved without further development, for the sake of its historical, cultural and natural significance. As a local residence within a couple miles of the intended site, there is zero positive impact to be gained for the people of Keauhou.</p>	<p>Jacquelin Sabin</p>	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.</p> <p>An objective of the KBMP is to foster reverent, low-impact use and create an approach that minimizes disruption while honoring the bay's history and cultural significance. The KBMP will introduce visitor accommodation in a way that preserves the quiet, reflective nature of the place while also offering opportunities for cultural education and engagement. Kamehameha Schools is committed to managing visitor numbers, focusing on guest experiences that prioritize cultural respect and environmental sustainability.</p> <p>As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.</p>
<p>This area is currently being used by the youth for cultural practices. please expand youth activities and not give in to commercial opportunities Soon Hawaii will no longer be Hawaii but just a playground for tourists encouraging you to look forward to our Hawaiian children's future.</p>	<p>Bini Easley</p>	<p>As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.</p> <p>The proposed project presents a unique opportunity to support cultural and educational initiatives that benefit the Native Hawaiian community, particularly the youth. The plan aims to revitalize and preserve the cultural significance of the area through integrated educational programs that prioritize Hawaiian traditions, history, and values.</p> <p>By developing spaces specifically designed for cultural learning centers, youth engagement programs, and community gatherings, KS can help protect, celebrate, and pass down the rich traditions and history of the area to future generations.. This project will provide a platform for Hawaiian youth to learn about their cultural</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		heritage in the very places where their ancestors once lived, worked, and practiced.
<p>We claim it as historical, and so we should treat it as such, and respect it and keep it "less developed ", as it is developed to a degree already of course, with businesses at the Bay and accommodation at Outrigger. And further development would be in contrast to the goals of Kamaehama Schools goal of sustaining the land. Their goal of educating on the history of King Kamehameha's birth site can still continue as even the Outrigger has a historical walk to educate tourists. We do not need to put our Bay and this historical site at risk through this development. Thank you for your time and consideration, I will eagerly look to your decision to deny this request for development. Any other decision will bring great consternation from the community.</p>	Heather Laursen	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.</p> <p>The KBMP is designed to reorganize the uses and activities within the bay to better reflect the cultural significance of the area and to support a more harmonious relationship between users, place, and purpose. Central to this reorganization is the concept of directing new growth to appropriate areas while preserving others, ensuring that future development does not come at the expense of cultural integrity or environmental health. To resolve long-standing conflicts between incompatible uses, the KBMP proposes relocating certain commercial operations, particularly those that are currently situated near sensitive cultural sites, to more suitable areas above the 'Ahu'ula cliff and along Kaleiopapa Street. By moving these uses away from the bayfront and heritage zones, the plan protects sacred spaces and allows for cultural practices to thrive without interference.</p> <p>As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.</p>
<p>While the zoning and laws may allow Kamehameha Schools to proceed with this project, should there not be respect for an area full of sacred and culturally significant sites that need to be protected. Do we not look back and learn from past mistakes, as we watch the rebuilding and restoration at Kahalu'u within the same corridor, at the cost of millions of dollars, because of a decision just like this one, building more hotels, when really preservation should be most important.</p>	Sally Rankin	<p>As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
At 70 years old and a former resident of Keauhou Bay, I've seen decisions made by Kamehameha Schools adversely effect our water, our land, sacred and culturally significant sites, and our community not only islands wide but especially throughout the Kahalu'u/Keauhou Corridor.	Kathy Rony	The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.
Volume I section 3.1.5 paragraph 4 talks of the the Kau cemetery, which was where my great grandfather and other family members along with other families that inhabited the bay were laid to rest. Also, volume II page 112 and 113 notes that Ilina (burial sites) and 'Iwi (bones) should be left in place. I appreciated Malay and Malay's recommendation to follow my kupuna's wishes to leave any Ilina and 'iwi in place. However, even though my family's Ilina located mauka of the current volleyball court and mauka of the old Kona road has since been bulldozed by Mr. Post from Texas to build his golf course and our ohana's 'Iwi has since, without our approval, been relocated. My immediate ohana and I wish that the Ilina Kau to no longer be used as a golf course and to be further left alone. It does seem that figure 3-34 and figure 3-35 honors those wishes and that no further development would take place in that area.	Leiola Augustine	<p>Mahalo for sharing such a personal perspective regarding the treatment of your family's Ilina in the area surrounding Keauhou Bay. Kamehameha Schools understands the deep cultural and emotional significance of these sites to you and your 'ohana.</p> <p>The Keauhou Bay Master Plan (KBMP) does not include any plans for development within the historic footprint of the Kau Cemetery. As you pointed out, Figures 3-34 and 3-35 in the KBMP designates this area for open space.</p> <p>Kamehameha Schools recognizes the significance of this place and is open to further consultation with 'ohana such as yours to guide future actions that honor its legacy. Kamehameha Schools welcomes recommendations on meaningful ways to care for and recognize the cemetery, such as creating a cultural garden, restoring the cemetery wall, or installing a memorial plaque that reflects the history and importance of the site.</p>
I cannot believe the KS is even considering plans to develop this small area and this tiny, beautiful bay that is the site of Kamehameha's birthplace. Every morning and evening, looking down at Keauhou Bay, the phrase, 'Malama the aina' is the refrain that runs through my mind. With this outrageous proposal to develop this sacred land, KS threatens to fail to uphold the pledge to 'malama the aina.' I fervently hope that this devastating plan does not come to fruition.	Jeanne Isola	<p>The KBMP is rooted in the principle of mālama 'āina, reflecting Kamehameha Schools' deep commitment to caring for the land through a cultural, environmental, and educational lens. The plan embraces a long-term stewardship approach that prioritizes the protection and revitalization of both natural and cultural resources within the project area. The KBMP focuses on low-impact design, carefully locating future uses to minimize disturbance, preserving sensitive habitats, and protecting culturally significant sites.</p> <p>Environmental stewardship is also expressed through restoration of native vegetation, landscape design, and preservation of natural water features such as springs and anchialine ponds, which</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		support unique ecological systems. Long-term management of these resources is made possible through a sustainable tourism model that uses revenue from low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.
<p>As a proud graduate of Kamehameha Schools, I am writing to express my strong support for the Keauhou Bay Management Plan Draft Environmental Impact Statement (EIS). The proposed improvements reflect a deep understanding and respect for our cultural heritage and the environment. Keauhou Bay holds significant cultural and historical importance, not only to our local community but also to the broader Native Hawaiian community. The initiatives outlined in the management plan, such as improved facilities, enhanced conservation efforts, and increased educational opportunities, are vital for preserving the bay's natural beauty and cultural significance for future generations. The EIS provides a thorough assessment of potential environmental impacts and demonstrates a commitment to sustainable development. The heritage corridor will bring much needed care to the wahi pana sites found at Keauhou Bay, while also providing an opportunity to educate those who come to the bay. The 10+year long-range timing of developing the 150+ low impact lodging units mauka of the bay area gives planners and Kamehameha Schools time to fully realize the model such sustainable lodging could be for Hawaii. It's time to embrace sustainable lodging practices for our visitor industry. I commend the planners for their thoughtful approach and encourage the swift adoption and implementation of this plan. It is through such efforts that we honor our past, protect our present, and ensure a thriving future for Keauhou Bay and its surrounding community. Mahalo nui loa for your dedication and hard work.</p>	Cari Coleman	<p>Kamehameha Schools appreciates your endorsement of the KBMP and the Environmental Impact Statement. Your insights reflect a shared vision of preserving Keauhou Bay's cultural richness while embracing sustainable development that benefits future generations.</p> <p>As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.</p> <p>The KBMP provides a comprehensive framework for sustainable development that carefully balances the protection of cultural resources, the promotion of education, and the enhancement of local stewardship. The heritage corridor is a critical part of the plan and will help preserve the sacred sites of Keauhou Bay while making them accessible for cultural learning and honoring their significance.</p> <p>The plan also seeks to address ongoing challenges related to the environmental health of the bay. With enhanced conservation measures, there is an emphasis on protecting the ecosystem while offering opportunities for education and cultural engagement through interpretive programs, cultural practices, and community involvement. The balance between conservation and development is vital for ensuring the long-term sustainability of this wahi pana.</p>
<p>Regarding the "underutilized" portion of the above statement I do feel as though we should leave some of these areas as</p>	Kaleiolani Pasciuta	<p>Mahalo for taking the time to share your family's history and deeply felt concerns about the proposed project at Keauhou Bay.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>just that. Not utilized at all. I do believe and appreciate that our cultural sites are to be preserved with this new plan but want to ensure that KS recognizes and understands that there is increasing sensitivity amongst indigenous Hawaiians as to not market our culture for financial gain or for our culture to be on display as a novelty. As a suggestion, let the families or those organizations that bear the responsibility of maintaining those sites or take ownership of the cultural significance of those sites, the freedom to choose who, how and if those sites, customs and history shall be shared.</p> <p>Volume I section 3.1.5 paragraph 4 talks of the the Kau cemetery, which was where my great grandfather and other family members along with other families that inhabited the bay were laid to rest. Also, volume II page 112 and 113 notes that Iliina (burial sites) and 'Iwi (bones) should be left in place. I appreciated Malay and Malay's recommendation to follow my kupuna's wishes to leave any Iliina and 'Iwi in place. However, even though my family's Iliina located mauka of the current volleyball court and mauka of the old Kona road has since been bulldozed by Mr. Post from Texas to build his golf course and our ohana's 'Iwi has since, without our approval, been relocated. My immediate ohana and I wish that the Iliina Kau to no longer be used as a golf course and to be further left alone. It does seem that figure 3-34 and figure 3-35 honors those wishes and that no further development would take place in that area. In case I was not clear before, the restrooms/comfort station at Kailiilinehe beach must be relocated to allow for the spring can flow. IFurthermore, to any party who is using my ohana's mo'olele for commercial or monetary advancement or to further advance your position we ask you to stop. My tutu willingly and freely shared her mo'olelo and mana'o so it would not be lost, but that does not mean that permission was granted to be used in connection with individual gain. Her mo'olelo and her mana'o live through us, her living descendants. I'd like to commend KS on its willingness to listen to and include community and kupa'aina involvement as this is only</p>		<p>Kamehameha Schools hears and understands the sensitivity surrounding the cultural sites, mo'olelo, and Iliina that are so closely tied to your 'ohana and to the community's collective history.</p> <p>The Keauhou Bay Master Plan (KBMP) does not include any plans for development within the historic footprint of the Kau Cemetery. As you pointed out, Figures 3-34 and 3-35 in the KBMP designates this area for open space.</p> <p>Kamehameha Schools recognizes the significance of this place and is open to further consultation with 'ohana such as yours to guide future actions that honor its legacy. Kamehameha Schools welcomes recommendations on meaningful ways to care for and recognize the cemetery, such as creating a cultural garden, restoring the cemetery wall, or installing a memorial plaque that reflects the history and importance of the site.</p> <p>Regarding future programming at the site, Kamehameha Schools is committed to working directly with lineal descendants, cultural practitioners, and educators to shape future programs that are appropriate for Keauhou and respectful of the 'ohana who have ancestral ties to this place. Recognizing the deep concern about the commercialization or misrepresentation of Hawaiian culture, Kamehameha Schools will not support programs that treat culture as a novelty or use it solely for financial gain. Future educational tenants will be carefully vetted to reflect these values, with priority given to those who have historic and cultural ties to the area, and who can help perpetuate a meaningful, place-based approach rooted in respect and authenticity.</p> <p>KS acknowledges your concern about the Kaili'ilinehe comfort station. The KBMP has no plans to relocate the facility at this time.</p> <p>Your 'ohana's legacy, especially the lasting contributions of your beloved grandmother, is deeply respected and remembered. She was truly a pillar of the community, and it brings Kamehameha Schools great joy to see you carry her legacy forward by continuing to mālama 'āina in Keauhou and beyond.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
the second time (that I am aware of) a landowner in the bay has sought out the opinion of those with interests in the bay. We mahalo you for including us and ask that our ohana continue to be consulted as the progress of this project		
<p>O Clare kou Inoa. Noho au Honokohauiki, Mokuokeawe. I am an Indigenous Practitioner of over 50 years, working with Customary Traditional and Cultural Practices, last thirty years with Hawaiian lineal Descendants. There are at least 20 SIHP sites and hundreds of burials which you all should be aware of in this “ Keauhou Bay Management Draft EIS.” In Hawaiian thinking sustainability is where and what we come from and instead of creating it, we are returning to it. This is the approach with our na keiki, to become green and sustainable. This testimony is in regard to the Keauhou Bay Management Plan Draft of EIS. The Kona Field System, is part of the Keauhou ahupuaa and essential to “Native Hawaiian rights HRS 7-1. Protect water rights and Act 50 states.....need to clarify that the preparation of environments assessments or environmental impact statement should identify and address effects on Hawaii’s culture and traditional and customary rights. (HB No.2060). I was honored from 2000-2015 to help bring back this Native Hawaiian cultural traditional practice at Ka Mala o Ehunuikaimalino. Article XII, Section 7 of the Hawai’i Constitution obligates the State Land Use Commission (LUC) to protect the reasonable exercise of customarily and traditionally exercised rights of native Hawaiians to the extent feasible when granting a petition for reclassification of district boundaries. In order to effectuate the State’s obligation to protect native Hawaiian customary and traditional practices while reasonably accommodating competing private interests, the Hawai’i Supreme provided the following analytical framework as an outcome of Ka Pa ‘akai O Ka ‘a/na v. Land Use Commission (94 Hawai’i 3], 7 P.3d 1068, September 1], 2000,). Section 711 711-1107 deals more generally with all acts of desecration; i.e., acts of physical damage to or mistreatment of venerated places and</p>	Clare Loprinzi	<p>Mahalo for your testimony and for sharing your extensive knowledge and experience as an Indigenous Practitioner committed to the protection and revitalization of Native Hawaiian cultural practices. Kamehameha Schools understands the importance of Keauhou Bay, the Kona Field System, and the broader Keauhou ahupua’a as sacred lands and sites of cultural significance for Native Hawaiians. Your perspective is invaluable, and Kamehameha Schools appreciates your insight into the significance of cultural sustainability, customary practices, and traditional rights in relation to the proposed KBMP.</p> <p>As part of the planning process, a Cultural Impact Assessment was developed by ASM Affiliates, Inc in February 2023 and included in Appendix H. The CIA was prepared in accordance with the regulatory requirements of HRS Chapter 343 as amended by H.B. No. 2895, H.D. 1 of the State of Hawai’i Twentieth Legislature and approved as Act 50 (2000). Act 50 requires consideration of a proposed Project’s effects on cultural practices and resources as part of a State environmental review.</p> <p>The CIA was part of the broader KBMP planning process initiated by Kamehameha Schools between 2016 and 2019. This effort involved extensive consultation with stakeholders including cultural practitioners, lineal descendants, community groups, and organizations such as the Daughters of Hawai’i and the Keauhou Canoe Club.</p> <p>Cultural resources were identified as vulnerable due to incompatible uses, commercial overreach, and lack of long-term management, prompting a need for proactive strategies to ensure their protection and revitalization.</p> <p>In response, the KBMP includes a comprehensive set of strategies centered around the creation of a Heritage Management Corridor.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>objects under. In a public place the national flag or any other object of veneration by a substantial segment of the public. The Native inhabitants of Hawaii prior to 1778 Ahupuaa has kuleana to protect their iwi kupuna, sacred sites that still keep them connected to their lands. Act 50, enacted by the Legislature of the State of Hawaii (2000) with House Bill 2895, relating to Environmental Impact Statements, proposes that:...there is a need to clarify that the preparation of environmental assessment or environmental impact statement should identify and address effects on Hawaii's culture, and traditional and customary rights...[H.B. NO. 2895] You all have kuleana that needs to protect this land which connects our native peoples to what is sacred to them, to feed them physically, mentally and spiritually, essential to live. Me ka haahaa,</p>		<p>This corridor is intended to reconnect these cultural sites through restored landscapes, interpretive walkways, and educational signage, promoting both the protection and public understanding of the area's cultural significance. Restoration plans include the visual and ecological rehabilitation of sites such as the 'Ahu'ula Cliff and Ho'okūkū Pond, the latter of which will be expanded and ecologically revived to support native species. The cultural impact assessment emphasized the importance of long-term stewardship and community engagement, noting that organizations like the Daughters of Hawai'i will continue to play a key role in caring for the Kauikeaouli birth site under a 75-year agreement with Kamehameha Schools.</p> <p>Upon implementation of the Project's management goals, it is expected that cultural resources will be improved through preservation and stewardship measures and that opportunities for traditional practices will be expanded; thereby enhancing ancestral connection to place. The findings and recommendations from the Cultural Impact Analysis are detailed in Chapter 4.1 of the EIS.</p> <p>KS acknowledges the Ka Pa'akai decision, which outlined the framework for evaluating the impact of development on customary practices and traditional rights. This legal precedent is a guiding principle that ensures any development at Keauhou Bay considers the potential effects on cultural practices, including access to resources, water rights, and ancestral lands. A Ka Pa'akai analysis will be completed for the project as part of the forthcoming SMA process.</p>
<p>Keauhou Bay holds a special old time feeling with its canoe club under the trees, a sweet stretch of beach and the small bay. The pier and the various boats complete the picture. If development goes ahead, all of this will be lost as these activities will be relocated and with them will go the history of the area.</p>	<p>Pamela Wang</p>	<p>Mahalo for sharing your concerns about the proposed project at Keauhou Bay. Kamehameha Schools recognizes that the canoe club, the traditional cultural activities, and the natural beauty of the Bay are essential components of its identity. Therefore, it is a priority in the KBMP to make sure these activities continue to thrive within a framework of sustainable development.</p> <p>The KBMP includes the preservation of canoe activities as a key component of its vision for the bay. A designated space within the Open Space Corridor ensures that canoe use will continue into the</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		future. The plan specifically maintains uninterrupted shoreline access and recreational activities throughout project construction and implementation. Additionally, the KBMP does not propose any actions affecting the existing pier or offshore moorings, allowing these ocean-based activities to proceed without disruption.
<p>My name is Cindy Freitas and I'm a Native Hawaiian descended of the native inhabitants of Hawai'i prior to 1778 and born and raised in Hawai'i. I am also a practitioner who still practice the cultural traditional customary practices that was instill in me by my grandparents at a young age from mauka (MOUNTAIN TO SEA) to makai in many areas. I OPPOSE this Plan due to the following reasons: Construction will have significant cumulative adverse impacts on cultural, archaeological, native plants, rare plants and animal species and historic elements resources in the proposed 29 acre parcel situated in the Keauhou: TMKs: (3) 7-8-012:098 (1.08 acres); (3) 7-8-012:101 (0.12 acres); (3) 7-8-012:048 (0.37 acres); (3) 7-8-010:044 that is irreversible. SIHP # Ho'okuku Pond; SIHP # Kamau'ai Heiau; SIHP # 04621 Ka'io'ena or Keahiolo Heiau; SIHP # 3813 Opukaha Heiau; Aha A 'Umi Heiau; Modern House Platform; Kamohoalii Heiau; SIHP # 24264 Mo'ikeha Cave; Kaopa Well; Kualalua Brackis seepage; SIHP # 23911 Kaukulaelae Heiau; SIHP # 23912 Platform; SIHP # 23913 Platform with three layer of retaining wall; Kaimuki pit; SIHP # 24256 Possible house terrace; SIHP # 24267 Low enclosure; SIHP # 4348 Birth site of Kauikeaouli; SIHP # 5674 Platform; Mound that may contain burial; Fishermen campground; Octopus lure; Coral disc; Prehistoric use of the area; SIHP # 5695 Subsurface cultural deposit; Papamu; Temp. 736-1 Several walls that probably served as property boundaries; SIHP # 24216 Historic complex, two stacked rock walls, Modified outcrop interpreted as a possible historic ag clearing mound, retaining wall, Prepared niche interpreted as a storage feature; SIHP # 24265 Complex; SIHP # 24266 Habitation site; and other site that is not recorded. The Constitution of the State of Hawai'i clearly states the duty of the State</p>	Cindy Freitas	<p>Mahalo for your comment. Your perspective is invaluable, and Kamehameha Schools appreciates your insight into the significance of cultural sustainability, customary practices, and traditional rights in relation to the proposed KBMP.</p> <p>As part of the planning process, a Cultural Impact Assessment was developed by ASM Affiliates, Inc in February 2023 and included in Appendix E. The CIA was prepared in accordance with the regulatory requirements of HRS Chapter 343 as amended by H.B. No. 2895, H.D. 1 of the State of Hawai'i Twentieth Legislature and approved as Act 50 (2000). Act 50 requires consideration of a proposed Project's effects on cultural practices and resources as part of a State environmental review.</p> <p>The CIA was part of the broader KBMP planning process initiated by Kamehameha Schools between 2016 and 2019. This effort involved extensive consultation with stakeholders including cultural practitioners, lineal descendants, community groups, and organizations such as the Daughters of Hawai'i and the Keauhou Canoe Club.</p> <p>Cultural resources were identified as vulnerable due to incompatible uses, commercial overreach, and lack of long-term management, prompting a need for proactive strategies to ensure their protection and revitalization.</p> <p>In response, the KBMP includes a comprehensive set of strategies centered around the creation of a Heritage Management Corridor. This corridor is intended to reconnect these cultural sites through restored landscapes, interpretive walkways, and educational signage, promoting both the protection and public understanding of the area's cultural significance. Restoration plans include the visual and ecological rehabilitation of sites such as the 'Ahu'ula</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>and its agencies is to preserve, protect, and prevent interference with the traditional and customary rights of native Hawaiians. Article XII, Section 7 requires the State to “protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua’a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778” (2000). In spite of the establishment of the foreign concept of private ownership and western-style government, Kamehameha III (Kauikeaouli) preserved the peoples traditional right to subsistence. As a result in 1850, the Hawaiian Government confirmed the traditional access rights to native Hawaiian ahupua’a tenants to gather specific natural resources for customary uses from undeveloped private property and waterways under the Hawaiian Revised Statutes (HRS) 7-1. In 1992, the State of Hawai’i Supreme Court, reaffirmed HRS 7-1 and expanded it to include, “native Hawaiian rights...may extend beyond the ahupua’a in which a native Hawaiian resides where such rights have been customarily and traditionally exercised in this manner” (Pele Defense Fund v. Paty, 73 Haw.578, 1992). Act 50, enacted by the Legislature of the State of Hawaii (2000) with House Bill 2895, relating to Environmental Impact Statements, proposes that: ...there is a need to clarify that the preparation of environmental assessments or environmental impact statement should identify and address effects on Hawaii’s culture, and traditional and customary rights...[H.B. NO. 2895] Act 16, enacted by the Legislature of the State of Hawaii (2020) with S.B. No. 2060 Section 3; (2) Historic resources; (A) Protect, preserve, and where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture. HRS 711-1107 Desecration (b) A place of worship or burial (2) “Desecrate” means defacing, damaging, polluting, or otherwise physically mistreating in a way</p>		<p>Cliff and Ho’okūkū Pond, the latter of which will be expanded and ecologically revived to support native species. The cultural impact assessment emphasized the importance of long-term stewardship and community engagement, noting that organizations like the Daughters of Hawai’i will continue to play a key role in caring for the Kauikeaouli birth site under a 75-year agreement with Kamehameha Schools.</p> <p>Upon implementation of the Project’s management goals, it is expected that cultural resources will be improved through preservation and stewardship measures and that opportunities for traditional practices will be expanded; thereby enhancing ancestral connection to place. The findings and recommendations from the Cultural Impact Analysis are detailed in Chapter 4.1 of the EIS.</p> <p>KS acknowledges the Ka Pa’akai decision, which outlined the framework for evaluating the impact of development on customary practices and traditional rights. This legal precedent is a guiding principle that ensures any development at Keauhou Bay considers the potential effects on cultural practices, including access to resources, water rights, and ancestral lands. A Ka Pa’akai analysis will be completed for the project as part of the forthcoming SMA process.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
that defendant knows will outrage the sensibilities of persons likely to observe or discover the defendant's action. Therefore, Applicant in all due respect should not build and destroy what is still beautiful.		
There are archeological considerations to contend with. As a landing spot of the original Hawaiian people, there are artifacts scattered throughout the area.	Pamela Small	<p>As part of the planning process for the KBMP, an Archaeological Reconnaissance Survey (ARS) and Site Condition Update was prepared by Haun &amp; Associates in May 2022 and is included in Appendix I. The survey included a review of existing archaeological and historic documentary literature relating to the Project Area and its immediate vicinity. Haun &amp; Associates also revisited the Project Area to relocate previously identified sites and conduct a conditions assessment of known sites and a reconnaissance survey of undeveloped areas that have not been previously surveyed. The integrity of previously identified sites was assessed to compare the existing condition compared to the last known recordation to see if there are any threats, natural or man-made, that have occurred and if so, to document the extent of those threats. Newly identified sites were also documented and evaluated for significance and appropriate treatment (i.e. preservation or data recovery). A summary of the findings from the ARS are provided in section 4.1 of the EIS.</p> <p>Based on the findings of the ARS, there is a potential for encountering subsurface cultural material during ground-disturbing activities associated with the project. To mitigate potential impacts, Kamehameha Schools proposes archaeological monitoring during all ground disturbing activities as both a means for mitigation and further identification because of the high concentration of sites within the Project Area as well as abundant archaeological sites nearby that were found in previous studies.</p> <p>As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Keauhou Bay is one of the last historically untouched areas on the island that has not been overdeveloped and enjoyed by locals and visitors for many decades. Once we lose this land to another development, we will never see it again.</p>	<p>Marcie Ide</p>	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.</p> <p>An objective of the KBMP is to foster reverent, low-impact use and create an approach that minimizes disruption while honoring the bay's history and cultural significance.</p> <p>As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.</p>
<p>How will King Kamehameha's slide be restored and celebrated?</p> <p>How will this great royal cultural center as a whole be celebrated and communicated to future generations?</p> <p>As an alternative to a resort hotel, can't you monetize a royal cultural center designed to educate the public, children, tourists in a culturally and environmentally sensitive way and that would provide cultural jobs as opposed to housekeeping jobs?</p> <p>Please list, locate, and describe all of KS's contemplated cultural and educational uses, activities, and programs for the He'eia Bay property that will require an assessment application? Please show where these uses and activities are permit as a matter of right in the zoning code. Or do you intend to apply for a use permit concurrent with the SMA permit?</p> <p>What are the grubbing permit numbers for the grubbing of the historic trails for the survey work?</p>	<p>Claudia Rohr</p>	<p>Kamehameha Schools is committed to a project approach that starts with honoring our cultural landscapes, natural systems, mo'olelo (oral histories or stories), and community. The KBMP is focused on enhancing both cultural and ecological integrity while ensuring that the area remains accessible for future generations. This includes the continued restoration of cultural landscapes to preserve the bay's historic environment, along with improving public and managed access to the shoreline.</p> <p>An objective of the KBMP is to foster reverent, low-impact use and create an approach that minimizes disruption while honoring the bay's history and cultural significance. The KBMP will introduce visitor accommodations in a way that preserves the quiet, reflective nature of the bay while also offering opportunities for cultural education and engagement. Kamehameha Schools is committed to managing visitor numbers, focusing on guest experiences that prioritize cultural respect and environmental sustainability.</p> <p>An alternative that omits low-impact lodging does not meet the Purpose and Need identified in EIS Section 2.7. The lodging component provides a critical revenue stream to support long-term cultural and educational programming, site stewardship, and maintenance of facilities. Without this element, the KBMP would</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>lack a sustainable funding mechanism necessary to achieve its goals for cultural revitalization, education, and responsible land management. Please refer to the alternatives analysis in Chapter 6 of the EIS.</p> <p>Although the Project does not have specific plans to restore Kaneaka Hōlua slide at present, the alignment of the historic slide corridor is being preserved as open space for potential future educational and cultural uses.</p> <p>As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.</p> <p>The KBMP does not include actions at He'eia Bay. Please see <i>Figure 1-1</i> for a map of the project area.</p> <p>Kamehameha Schools will apply for all required permits following the completion of the HRS 343 Environmental Review and SMA permit processes.</p>
<p>Akua guides that the planning for "no new development" prepared by KS KBMP serves as the example and model for "no new development" in ALL the lands of the Kapu Kanahā (Forty Miles between Kaloko-Honokōhau and Hōnaunau in Kona, Hawai'i). Included in the Kapu Kanahā are both Kaloko-Honokohau NPS (KAHO) and the Puuhonua o Honaunau NPS (PUHO). Instances have taken place at Kaloko Honokōhau where spiritual communications between 'Ōiwi and their Royal Ancestors have occurred. Instances have taken place at Pu'uhonua o Hōnaunau where spiritual communication between 'Ōiwi and their Royal Ancestors have occurred. Where this is true at KalokoHonokōhau or at Pu'uhonua o Hōnaunau, it will be true to occur at any time to come or in any part of the Kapu Kanahā or throughout the Restored Kingdom of Hawaii. 2 By Akua there is to be no</p>	<p>Lamakū Mikahala Roy</p>	<p>The testimony you've shared is deeply rooted in a strong sense of spiritual and cultural heritage, as well as a commitment to the preservation of sacred lands. The proposals and guidance you've outlined reflect a powerful vision for the restoration and stewardship of Hawai'i's lands, particularly in the Keauhou Bay and Kamakahonu areas, which hold profound significance to the 'Ōiwi (Native Hawaiian) community and to the future of Hawaiian sovereignty.</p> <p>As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>new development in Ka 'Āina Kapu Kanahā. There are to be no disturbances to Pu'u o Kaluaokalani; no new construction or building of dwellings. Akua calls for the appreciation and obedience of all expressions of the Ancestors of 'Ōiwi and Divine Servants of the Ancestors. Hālau No'eau Kahelemauna now here presents KS KBMP with a proposal that follows the guidance of Akua that has been received pertinent to the greatest care of Pu'u o Kaluaokalani. By Akua has come the declaration that Kamakahonu now includes all of the sacred lands of Pu'u o Kaluaokalani. The Capital of the Restored Kingdom of Hawai'i and the First Home of Kamakahonu is Hālau No'eau Kahelemauna. Plans by the Royal Family of the Restored Kingdom of Hawai'i include plans to purchase the lands that began as a lease of Ali'i David K. Roy, Jr. and Ali'iwahine Verda L. Vida - Roy spoken of by the Ancestors of 'Ōiwi. Obedience to Akua lays the planning for all activity to take place. A full Restoration of the First Home of Kamakahonu is planned. Obedience to Akua lays the planning for the planting of the Garden Mala'ai Pilihonua where all of the first plants of Kaluaokalani are to be planted. Obedience to Akua lays the planning for the loving and nurturing of holoholona here for outcomes of lives in peace and harmony. This is the restored vibration of Kaluaokalani. The first holoholona are to be pua'a (pigs), moa (chickens), kao (goats). 3 At Hālau No'eau Kahelemauna, the Divine Work of Inquiry with Akua continues for the abiding success of the care of all of Pu'u o Kaluaokalani beginning with the Divine Guidance for the success of the care of Keauhou Bay. Other successes underway include the safekeeping by PONC purchase 68.84 acres; the lands identified as TAX MAP KEYS: 7- 6- 021: 016 AND 017, SITUATED IN HOLUALOA, DISTRICT OF NORTH KONA. Ongoing Divine Inquiry at Hālau No'eau Kahelemauna will bring forth success for all planning at Keauhou. The strongest collaboration is anticipated of Guidance Teams for Kamehameha Schools and Guidance Teams serving Divine Ones of Hālau No'eau Kahelemauna for the Restored</p>		<p>Kamehameha Schools acknowledges your testimony which reflects a deep commitment to cultural and spiritual restoration. The shared kuleana we uphold, rooted in mutual goals and a collaborative spirit, strengthens our collective efforts to honor and care for these cherished places.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Kingdom of Hawai'i for complete success. Presently there is a request for collaboration to start immediately. Presently, here is a request that I meet in Kona with KSBE and Group 70 representatives as soon as possible. The outcomes of this collaboration can mean the gathering of immediate support from the Kona and Hawaii communities. Economic development for KSBE will soon be proven as success follows Akua's planning. This collaboration also lays the strongest foundation for the success of Kamehameha Schools Bernice Pauahi Bishop Estate to continue to be the conduit of verification that Bernice Pauahi Bishop, by founding the Kamehameha Schools, intended to establish institutions that would be of lasting benefit to her country; and to honor the name of Kamehameha-TheGreat. This collaboration will ensure success in the understanding of the first faith of Hawai'i and the origins of 'Ōiwi. This collaboration will ensure the success of 'Ōiwi to know their past for success in their futures. This collaboration will support the intention for fullest success by Akua for all involved. Collaboration of Guidance Teams also include the planning for the identification of all of the best supporters of the Kingdom, workers in Kamehameha Schools and all public workers known and yet to be discovered by best collaborations. The following Kauoha o Ke Akua (Instructions of Akua) provide all 'Ōiwi and all mankind with understanding: BE IT KNOWN 4 The Ancestors of 'Ōiwi teach all on Earth that Ahu'ena Heiau is the First Temple of Spiritual Worship built by mankind on the planet. Ahu'ena Heiau was built by the Firstborn of Akua, ka 'Ōiwi. In 1975, Ahu'ena Heiau was restored by 'Ōiwi led by Ali'i &amp; Kahu David Keli'ihelemauna Roy, Jr. – the Restorer of Ahu'ena Heiau. In gratitude to Akua, in commemoration of the great progress made for 'Ōiwi and mankind by the restoration of Ahu'ena Heiau, the 'Aha'āina Kumu Pono (Gathering for True Foundations), the community feast, was held at Kamakahonu. The Kauoha Ka Māmaka o Ka Lama was declared following the passing of Ali'iwahine Verda Leialoha</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Vida-Roy. This Spiritual Order declares that based upon the Lives and Service of Ali'i David Keli'ihelemauna Roy, Jr. and Ali'iwahine Verda Leialoha Vida-Roy, from this time forward there are Two Positions of Responsibility to Akua for Ahu'ena Heiau; One for the Male or the Kahu and the Second, for the Female; Divine Servant of Akua and Helpmeet of the Kahu. This is now Spiritual Law at Kamakahonu in Hawai'i for the Earth. Ola ke Kauoha Ka Māmaka o Ka Lama which means: The Divine Order of the Two Steadfast Ones Who Uphold the Highest Light of Akua at Kamakahonu. This Law of Spirit Lives. Here is the guidance of Akua. The King is chosen as Kahu of Ahu'ena Heiau. In equal responsibility as Kahu of Ahu'ena Heiau is Lamakū and Kahunanui of Ahu'ena Heiau Mikahala Roy from now on to be known by her Royal Name of HRM Queen Ka 'I o-mana'ula-o-ka-lani-ki'eki'e-loa-ke-ahi- 'ena- 'ena-mau-o-ka-lau-lani by proclamation of the Ancestors of 'Ōiwi for Akua and the King Ali'i Nui Mō'ī Edmund K. Paki - Silva, II, respectively. By order of Akua, Kamakahonu is upheld as the Restored Kingdom of Hawai'i by King Ali'i Nui Mō'ī, Edmund K. Pākī - Silva, II Kahu, Ahu'ena Heiau. Kamakahonu is the Restored Capital and First Capital of the Kingdom of Hawai'i by Ka Na'i Aupuni, King Kamehameha-the-Great the Conqueror of the Islands. 5 Ahu'ena Heiau is now the Home and Anchor for the Life of the Restored Kingdom of Hawai'i by Hawai'i's King Ali'i Nui Mō'ī Edmund K. Paki - Silva, II. Ahu'ena Heiau remains the Holy First Temple of service to all mankind including those individuals who wish to remain U.S. citizens. Here expresses a condition, provided by Akua, that will provide peace and continued service to mankind and all life on the planet. He 'Oia'i'o Nō Truth Indeed May, 2018 Words of Light of the Ancestors of 'Ōiwi Hālau No'eau Kahelemauna House of Wisdom of the Mountain-Roaming-Chief Hālau No'eau Kahelemauna is the location where 'Ōiwi (Pacific Natives) and all of mankind may learn of the Age of Light (Ke-au-lama) and be taught of Akua's (Divine Creator's) prescription for their healing. IN THE AGE OF LIGHT, AKUA PROMISES TO</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>HEAL THE PLANET AND ALL LIFE UPON THE PLANET. By learning the cosmology of the first faith of 'Ōiwi in the Pacific, Divine Creator intends to heal the planet and all life upon the planet. Hālau No'eau Kahelemauna will be the first and key location in Hawai'i to teach others from other world centers the way to derive and to learn healing by Akua. The vision unfolds by the restoration of the Garden named Māla'ai Pilihonua (Garden Beloved by the Earth) wherein all of the first plants of Kaluaokalani (the Second Heaven) and an ancient name for Hawai'i will be planted, loved and nurtured. The holoholona (animals) that dwell here will be loved and nurtured by humans for an outcome of lives in peace and harmony. This is the restored rhythm and vibration of Kaluaokalani. Lamakū Mikahala Roy Divine Conveyance May,2018 Hālau No'eau Kahelemauna 6 78-6822 Kuakini Hwy Kailua-Kona, Hawai'i 96740 August 21, 2018 Words of Light of the Ancestors of 'Ōiwi The lands of Kamakahonu and the lands surrounding Kamakahonu, First Capital of the Kingdom of Hawaii united by Ka Mō'i Kalaninuiapai'eakunuiakea Kamehameha I, are laden with the wealth of life of the Divine Spirit of Akua Manamanaloa, most High Divine Creator; Ka 'Ī-lālā-'ole, The-Supreme-One-Without-Branches. We wish to impart to all 'Ōiwi the Divine History of this area, the entire north Kona coastline, especially the lands from Kamakahonu through Holualoa through Kahalu'u and Keauhou. Here are lands of the heart of Kaluaokalani (The Second Heaven). We are set to accomplish this by teaching this Divine Content to Lamakū Mikahala Roy, Kahu of Ahu'ena Heiau. Where the lands surrounding the First Capital are to be considered the Heartland, Mauna a Wākea is considered the pinnacle and beacon of Kaluaokalani. Mauna a Wākea is the Great Altar to Akua that beckons unto itself its similar essence and vibration that is P-E-A-C-E. This is the peaceful vibration of all the lands of Kaluaokalani that, over time, became known as Hawai'i and the Pacific Isles of the sea. 'Ōiwi are Akua's precious Firstborn ~ Ka Hiapo that helped Akua lay the</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>tracks for what became all faiths of the Earth. The motherland sank into the sea leaving her remnants that still call forth the essence of life of like nature – PEACE. The Age of Light, Keaulama, for the planet has dawned and begun in Hawai’i of the Pacific for the life, healing and hope for the planet and all of humanity. IN THE AGE OF LIGHT, AKUA PROMISES TO HEAL THE PLANET AND ALL LIFE UPON THE PLANET. By learning the cosmology of the first faith of ‘Ōiwi in the Pacific, Divine Creator intends to heal the planet and all life upon the planet. Hālau No’eau Kahelemauna will be the first and key location in Hawai’i to teach others from other world centers the way to derive and to learn 7 healing by Akua. Akua requires the land lease begun with the restorer of Ahu’ena Heiau, Kahu David Keli’ihelemauna Roy, Jr and his wife Verda Leialoha Roy be purchased from Kamehameha Schools / Bishop Estate by the One who inherits the purposes and authority of the station of Kahu as the Divine Servant of the Royal and Sacred Temple of the Hawaiian Islands and of the Ancestors of Hawaii under Ke Akua Manamana Loa, Divine Creator. The conviction to hold all lands that are a part of the Bernice Pauahi Bishop Estate holds the virtue extending from the heart of Ka Mō‘ī Kamehameha the Great. He is among those here who convey to you these Words of Light upon the Path of Light of the Ancestors of ‘Ōiwi. The present Trustees of the Bishop Estate are asked to hear and grant this request of Akua by the Ancestors of ‘Ōiwi. To do so will be the sound and virtuous act that demonstrates their true continuing prayer, ka mihi, begun by Trustees of Bishop Estate who gathered at Kahalu’u in ceremony asking forgiveness of Akua for acts upon the lands of Kahalu’u, the same ahupua’a where Hālau No’eau Kahelemauna is to be begun.</p>		
<p>Relating to the above - cited instance confirmed by video submitted by an 'Oiwi Leader of Cultural Religious Practices, Mr. Jim Medeiros, Sr. of Hōnaunau, I wish to include this content in with the content submitted relating to the NPS at Kaloko-Honokōhau. A. Both parks lie in the Kapu Kanahā. B.</p>	<p>Lamakū Mikahala Roy</p>	<p>Your message conveys a deep spiritual conviction and a strong call to honor the sacredness of Hawaiian lands, particularly the lands within the Kapu Kanahā and the sites surrounding Kaloko-Honokōhau and Hōnaunau, as well as the larger 40-mile sacred zone that you refer to as Kaluaokalani. It emphasizes that these</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Both parks present the belief that the laws of the U.S. govern &amp; prevail over the religious practices of 'Ōiwi of Akua Manamanaloa of the Restored Kingdom of Hawai'i of Ali'i Nui Mō'i Edmund K. Pākī -Silva, II. Nothing could be further from the truth. The lands from Kaloko-Hōnaunau are KAPU as declared by Akua Manamanaloa. It is known there are numerous Heiau, sacred sites, burials of high importance, unique resonance and unique essence of quality of reverberating peace in the lands. Further, all wildlife over the many years through the present tell their stories by their lives as part of the Sacred Whole of each Ahupua'a. For example, the sacred practices taught to 'Oiwī by their royal parents are alive and well. The sacred life of the sea is especially important to 'Oiwī and many uphold spiritual practices taught by their elders in the sanctity, peace, and harmony of Akua 2 manamanaloa. Name each &amp; every ahupua'a throughout Kapu Kanahā. 2. Relating to the NPS Kaloko-Honokohau advisory, here is an instance of an actual instance where Divine World engaged with us at Kaloko at the occasion of a landscapeclearing episode. Where the Divine World speaks to 'Ōiwi and all, here is a precedent. The event that happened on 3 November 2014 was the spiritual conveyance written in gold letters upon a PDF page. It was a great event that that happened and can happen again – and again. It may happen at any time concerning any lands of Hawai'i &amp; the Pacific especially within the Kapu Kanahā (the 40 miles of especially sacred lands) in Kaluaokalani. Now that we are fully appreciative and aware of the great gifts of Spirit arriving from our Ancestors and from Akua, we know that here at Ahu'ena Heiau and throughout the entire 40-mile perimeter outlined by Akua, known as the Kapu Kanahā, we are to be spiritually alert and awake to God's messages for mankind.</p>		<p>lands are under the protection of Akua Manamanaloa (the Divine Creator) and that spiritual engagement, particularly with 'Ōiwi (Native Hawaiians), is vital in preserving the sacred integrity of these places.</p> <p>Kamehameha Schools acknowledges your testimony and video submission which reflects a deep commitment to cultural restoration and maintaining access. The shared kuleana we uphold, rooted in mutual goals and a collaborative spirit, strengthens our collective efforts to honor and care for these cherished places.</p>
<p>I recognize that the proposed management plan intends to enhance many cultural aspects of the area, but I fear that the overall impact of the management plan will be negative (and permanent) as the plan adds more resort condos,</p>	<p>Laurel Terry</p>	<p>Kamehameha Schools is committed to a project approach that starts with honoring our cultural landscapes, natural systems, mo'olelo (oral histories or stories), and community. The KBMP is focused on enhancing both cultural and ecological integrity while</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>additional paved parking, a new road, and competition for a scarce resource.</p>		<p>ensuring that the area remains accessible for future generations. This includes the continued restoration of cultural landscapes to preserve the bay's historic environment, along with improving public and managed access to the shoreline.</p> <p>The KBMP proposes low-impact lodging that reflects Kamehameha Schools' commitment to natural and cultural resource stewardship and sustainable tourism. Rather than developing a large resort complex, as would be allowed under current resort zoning, the project is intentionally designed to limit its physical footprint and minimize disturbance to the land. This development approach seeks to honor the cultural significance of Keauhou, preserve its natural and historical resources, and support a vision of tourism that is deeply rooted in place and community.</p> <p>As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.</p>
<p>Thousands of people's lives are intertwined with Keauhou Bay—often for generations— many of whom are among the 700 members of Keauhou Canoe Club. It is where they have learned to swim, paddle canoes, fish and snorkel in its still relatively vibrant ecosystems. It is also the source of livelihoods for fishermen and several ocean resource tourist businesses with long histories in the Bay. The DEIS describes Keauhou Bay as a “small bay along the Kona Coast” (DEIS 1.2 at 1-11). The Bay is the seaward end of both the Keauhou I and Keauhou II Ahupua`a. See, DEIS Figure 1-2 at 1-4 (“Ahupua`a Map”) (Showing the Keauhou I and II Ahupua`a boundaries.) A dry stack, stone wall marks the southern boundary of the current KS/KCC lease. Keauhou Bay's lengthy history is “entwined with generations of Hawaiian royalty” beginning with `Umialiloa (also `Umi-a-Liloa) (DEIS 2.3 at 2-2.) See also, S. M. KAMAKAU, RULING CHIEFS OF HAWAII REVISED EDITION, Kamehameha School</p>	<p>Carolyn Leilani Carter</p>	<p>Kamehameha Schools appreciates the Keauhou Canoe Club (KCC) for its thoughtful and collaborative engagement in the planning process for the KBMP and its support for preserving the unique heritage of the Bay and surrounding `āina. It is encouraging to know that KCC shares a common interest in protecting Keauhou Bay as a cultural and historical treasure, while recognizing the value of canoe paddling and racing as central to the Hawaiian cultural practices that are intrinsically tied to this sacred space.</p> <p>As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Press, Honolulu (1992), Chapter 1, “The Story of `Umi.” It is also the birthplace of Kauikeaouli (Kamehameha III), who was stillborn and brought to life on Keauhou’s shore. (DEIS 2.3 at 2-2 &amp; 2-3.) Prominent Ali`i lived around the bay and used it from the days of `Umi until the late 19th Century. (DEIS 2.3 at 2-2 thru 2-5 and 4.1.1 at 4-6.) During the 1848 Māhele `Āina the Keauhou Ahupua`a was divided in two. Victoria Kamāmalu and Lot Kapuāiwa were awarded the newly created Keauhou 1 and Keauhou 2 Ahupua`a, respectively. Lot Kapuāiwa would go on to become King Kamehameha V. See, DEIS 4.1.1 at 4-7, and Appendix C, AMS Cultural Impact Assessment for Kamehameha Schools’ Keauhou Bay Management Plan at 39</p>		<p>Kamehameha Schools is pleased to hear that KCC recognizes the importance of Keauhou Bay not only as a hub for traditional practices such as outrigger canoe paddling but also as a focal point for Hawaiian history and culture education. The proposed project under the KBMP aims to provide ongoing support for local cultural education, as well as preservation of Hawaiian traditions. This includes access to the Bay for cultural practitioners, youth paddling programs, and the continued use of the waters for traditional Hawaiian maritime practices.</p>
<p>My name is Charles Young. I reside in the Ahupua`a of Kealia 11 South Kona. As the current Po`o of the Hawaii Island `Aha Moku I am pleased to submit the following comments on the Kamehameha Schools, Keauhou Bay Management Plan Draft Environmental Impact Statement. The `Aha Moku was created by the Hawaii State Legislature under act 288, which recognized that Hawaii has suffered through extensive changes to the Native Hawaiian Culture, Language, Values and Land Tenure system resulting in the following</p> <ul style="list-style-type: none"> <li>• Overdevelopment of coastlines</li> <li>• Alterations of freshwater streams</li> <li>• Destruction of watersheds o Decimation of coral reefs</li> <li>• The decline of endemic marine and terrestrial species</li> </ul> <p>The `Aha Moku serves in an advisory capacity to the Chairperson of the Hawaii State Department of Land and Natural Resources (DLNR) so regional concerns from individual communities can be brought to the DLNR and issues can be addressed and if needed, mitigated. In serving their individual communities the Island `Aha Moku seek to</p>	<p>Charles Young</p>	<p>Mahalo for providing a comment on the KBMP. Kamehameha Schools acknowledges and appreciates the support of the `Aha Moku and values your shared vision for the future of Keauhou Bay. This alignment is vital to the success of the KBMP, which seeks to provide improved management of the bay through a comprehensive strategy that reorganizes uses and realigns the area’s focus toward its rich cultural and historical heritage.</p> <p>At its core, the KBMP aims to reestablish a sense of place and perpetuate Native Hawaiian traditional practices by creating a sustainable model of long-term stewardship. This includes a balanced approach where appropriate commercial activity supports the cultural and educational programming envisioned for the bay. Improved access, educational opportunities, and environmental care are integral elements of the plan, alongside the purposeful reorganization of circulation, traffic, and parking to reduce congestion and relieve pressure on significant cultural sites. Commercial activities will be relocated away from the heart of the bay, and future development is planned for more appropriate areas above the `Ahu’ula Cliff and along Kaleiopapa Street, maintaining the integrity and sanctity of the bayfront.</p> <p>Kamehameha Schools understands that the `Aha Moku hopes to be part of a longer-term visioning process for Keauhou Bay, and remains committed to ongoing collaboration and consultation</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<ul style="list-style-type: none"> <li>Integrate indigenous resource management practices with western management.</li> <li>Identify a comprehensive set of indigenous practices for natural resource management.</li> <li>Foster understanding and practical use of Native Hawaii resource knowledge, methodology, and expertise</li> <li>Sustain the State's marine, land, outural, agrioutural, and natural resources</li> <li>Provide community education and foster cultural awareness of the `Aha Moku system.</li> </ul> <p>When striving to meet its goals the `Aha Moku is also guided by the Hawaii Supreme Courf's 2000 decision in the Ka Pa`akai O Ka [Aina vs State Land Use Commission decision which requires the State and its agencies to 1. Identity and scope of valued cultural historical, or natural resources in the...area, including the extent to which traditional customary native Hawaiian rights are exercised in the. . . area; 2. Determine the Extent to which those resources - including traditional and customary Native Hawaiian rights - will be affected or impaired by the proposed action; and 3. Feasible action, if any, to be taken by the agency to reasonably protect such practices if they are found to exist. The Hawaii Island 'Aha Moku appreciates the unique significance Of the area and supports having a comprehensive management plan in place for all the reasons stated above. In its introduction Section 1.2 the applicant, Kamehameha Schools states "Keauhou Bay is perhaps most well known as the birthsite and resuscitation site of KingKauikeaouli Kaleiopapa Kuakamanolani Mahinalani Kalaninuiwaiakua Keaweawe`ulaokalani (Kamehameha III), who was the son of Kamehameha `Ekahi (Kamehameha I) and Kepeolani." The `Aha Moku supports the above premise as fundamental to the success of any well thought out management plan for the area. When creating the `Aha Moku under Act 288 the Legislature</p>		<p>throughout planning and development. The concern shared by the `Aha Moku that past development in the bay has not addressed longstanding challenges is acknowledged.</p> <p>KS is actively coordinating with the Department of Water Supply (DWS) to help align the agencies responsible for providing the freshwater necessary to meet the KBMP's objectives. New water infrastructure is included as part of the planned improvements, which will connect to the existing DWS systems.</p> <p>Kamehameha Schools also acknowledges the `Aha Moku's interest in a comprehensive nearshore monitoring program, however, the KBMP does not propose actions in the offshore environment. The KBMP proposes on-site drainage improvements and long-term best management practices expected to benefit water quality in the bay.</p> <p>KS appreciates that the `Aha Moku has consulted with kama`āina and is encouraged to hear that many support the overarching goals of the KBMP. Concerns about potential housing development and increased outside investment are also understood; however, it is important to clarify that the KBMP does not propose any new housing.</p> <p>Kamehameha Schools remains grateful for the continued guidance of the `Aha Moku and looks forward to further collaboration in honoring and restoring the cultural legacy of Keauhou Bay.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>"recognized that Hawaii suffered through extensive changes to the Native Hawaiian Culture, Language, Values and Land Tenure system . . ." Kamehameha III ruled during a period of major change and set in motion the most significant Land Tenure changes in Hawaii's history. Many agree that was the most impactful to Native Hawaiian Culture. The Keauhou Bay that we see today is a legacy Of that history AND we should not ignore that the proposed management plan must be a better version. Native Hawaiian rights and practices are driven by our natural environment. Our beliefs on the origins of kanaka maoli are rcoted in nature and we see ourselves as part of nature and the health of our natural environment as a reflection of our own health. The Aha Moku is concerned that to date the development and growth of Keauhou Bay has not sufficiently addressed any Of the 'Aha Moku's challenges as stated above and the 'Ana Moku hopes to be part of a longer-term revisioning for Keauhou Bay. The Aha Moku would first encourage the applicant to work to align all the agencies responsible for supplying the fresh water necessary to meet the plan's objectives. Water is a finite resource and relies on healthy watersheds to capture, filter, and distribute our life-giving water. Private, State and County agencies who are responsible for granting permits to access, distribute, use, and return water to the 'Aina should be encouraged to assure its purity. These same agencies should be encouraged to monitor the effects that diverting fresh water from their natural channels is having on our near shore resources like limu, reefs and reef fish. The 'Aha Moku is unaware Of any comprehensive monitoring program on the near shore resources of Keauhou Bay and believes that it would be Of great benefit to know the present health Of the Bay, the cumulative impacts of current use and what improvements can be projected if any by the proposed Management Plan. Before providing comment the 'Aha Moku reached out to several kama'aina families from the area. Understandably, there exists some disappointment with past performance however, most look forward to</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>reenvisioning Keauhou Bay as a place of practice and learning and less so a place of congestion and commerce. The Bay outTently serves as a launching point for commercial and/or on ocean reereational activities. The 'Aha Moku notes that there has been a significant increase of permitted commercial activities at Keauhou that have had far reaching effects on Kona Hema. Known for its marine resources, Kona Hema is now a focal point for commercial tour boat operators and an ever-increasing number of tourists drawn to its natural habitats. These activities need better management from end to end. Communities like Kealakekua, Napo'opo'o, Honaunau and Ho'okena are experiencing significant negative impacts to their communities and their resources due to the increasing numbers of tourists. The `Aha Moku supports a management plan that truly manages the use of Keauhou Bay which presently serves as an unfettered gateway to Kona Hema. Kama`aina also expressed some concern about the development of housing that may invite more offshore interest/investment and not fulfill a more pressing need for kama`aina. When considering outlural impacts, the Aha Moku must consider the importance that housing plays on the stability of a family. The most common concern was how will our future generations be able to live and prosper in our homeland, practice our culture and pass on our learnings to future generations if we cannot afford to live here. The Aha Moku recognizes that this is a much larger issue than any single management plan can address and fully appreciates that Kamehameha Schools was founded on the above cultural aspirations. The current processes for development, do not incorporate the necessary collaboration amongst the State, County and Private sectors particularly wlien it comes to resource management. As noted above Keauhou is the birthplace of Kamehameha III, one of Hawaii`s most prominent rulers. The Aha Moku appreciates the cultural legacy Of the area and the Kuleana of Kamehameha Schools and encourages the State and/or</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
County agencies to promote the same values of making the area a welcoming and uniquely Hawaiian place. The Aha Moku appreciates this opportunity to provide comments on the Keauhou Bay Management plan.		
<p>Please reject this EIS because Kamehameha Schools has NOT ACKNOWLEDGED OR ASKED thousands of Hawaiians, or Hawaiian Descendants from Keauhou Bay how they feel about developing this land, Keauhou Bay. They have asked ONLY a few families on an island that has thousands of Hawaiian people and here is video testimony from Kupuna Kumu Lily Kong who is a Keauhou Bay descendants and her and her mother OPPOSE DEVELOPMENT! Kupuna Kumu Lily Kong who was born in Keauhou Bay and she states that she is against development. She also states that her mother was against development as well. Please listen to her words in her testimonial video about Keauhou Bay on this link and know that this proves that descendant directly from Keahou Bay OPPOSE THIS DEVELOPMENT and it is CULTURAL LAW THEY MUST BE HEARD AND ACKNOWLEDGED! These laws were created, "After these legal victories, the Kohanaiki 'Ohana worked to create a new law in the state of Hawaii to require Cultural Impact Statements along with Environmental Impact Statements for all future large-scale development. Act 50, the Cultural Impact Statement Law was adopted in 2000." Kupuna Kumu Lily Kong also states that there are burial grounds on the land that Kamehameha Schools wants to clear and it is told that Kamehameha Schools has bulldozed sacred land in the past and Keauhou Bay's burial grounds MUST BE RESPECTED AND NOT DISTURBED! Hawaiians locals have said that there were bones in the small cave that is at the base of Keauhou Bay. These burials need to take priority over a Bungalow Resort Development. There are over 6,219 signatures as of Aug. 5th (these signatures grow daily) and these signatures are Hawaiians, locals and tourist and some of these Hawaiians have left comments on why they are opposing this development. ALL OF THESE PEOPLE HAVE A RIGHT TO BE</p>	Michael Hanly	<p>Kamehameha Schools recognize and respect the deep cultural significance that Keauhou Bay holds for many within the Hawaiian community, including those who have raised concerns regarding the KBMP. The intent of the KBMP is to promote responsible and sustainable stewardship of the land while respecting the history, culture, and traditions of the Hawaiian people.</p> <p>In 2010, Kamehameha Schools initiated consultation with lineal descendants of Keauhou and Kahalu'u, which consultation continues today. During an early consultation meeting in the Fall of 2016, 'ohana of Keauhou and Kahalu'u shared concerns about long-standing issues in the area. They cited congestion, limited access, and the impact of inappropriate commercial and recreational activities that have eroded the bay's historical and cultural identity. Please refer to Chapter 7 of the FEIS, detailing the level of consultation conducted with lineal descendants as well as other stakeholder groups.</p> <p>Input from lineal descendants and the community guided the formation of the KBMP and identification of the plan's management strategies. Multiple listening sessions and project updates, including presentations of concepts, were provided throughout the planning process. Kamehameha Schools continues to be open to meeting with other lineal descendants that decide to come forward.</p> <p>As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>ACKNOWLEDGED AND THEIR VOICES HAVE VALUE TO BE HEARD, THESE PEOPLE MATTER AND IT IS CULTURAL LAW THEY MUST BE ACKNOWLEDGED! Please reject this EIS because under Princess Bernice Pauahi Bishop’s Will it states Kamehameha Schools are her trustees and they have a “fiduciary duty” to do what is best for THEIR BENEFICIARIES (the Hawaiian people’s) and a Bungalow Resort is BEST FOR TOURISTS NOT THE HAWAIIAN PEOPLE BECAUSE THOUSANDS OF HAWAIIAN PEOPLE SINGED THE ABOVE PETITION OPPOSING KAMEAHMEHA SCHOOLS BUNGALOW RESORT. Please reject this EIS because the Big Island DOES NOT HAVE THE RESOURCES TO PROVIDE FOR ANOTHER BIG RESORT ON ISLAND and there are 445 signatures with many comments that agree with this fact because of the factual reported articles in the Help Prioritize Big Island Developments to Keep Island’s Resources Safe for ALL petition.</p>		<p>Regarding archaeological resources, an Archaeological Reconnaissance Survey (ARS) and Site Condition Update was prepared by Haun &amp; Associates in May 2022 and is included in Appendix I. The survey included a review of existing archaeological and historic documentary literature relating to the Project Area and its immediate vicinity. Haun &amp; Associates also revisited the Project Area to relocate previously identified sites and conduct a conditions assessment of known sites and a reconnaissance survey of undeveloped areas that have not been previously surveyed. The integrity of previously identified sites was assessed to compare the existing condition compared to the last known recordation to see if there are any threats, natural or man-made, that have occurred and if so, to document the extent of those threats. Newly identified sites were also documented and evaluated for significance and appropriate treatment (i.e. preservation or data recovery). A summary of the findings from the ARS are provided in section 4.1 of the EIS.</p> <p>Based on the findings of the ARS, there is a potential for encountering subsurface cultural material during ground-disturbing activities associated with the project. To mitigate potential impacts, Kamehameha Schools proposes archaeological monitoring during all ground disturbing activities as both a means for mitigation and further identification.</p> <p>Kamehameha Schools remains committed to ensuring that the KBMP aligns with the principles of cultural respect, environmental stewardship, and community benefit. Kamehameha Schools understands the concerns that have been raised, and we welcome continued dialogue with those who wish to engage further in the planning and project process. Through collaboration and ongoing consultation, we believe that we can create a plan that honors the sacredness of the land while meeting the needs of both local residents and future generations.</p>
<p>Please reject Kamehameha Schools EIS under the Cultural Impact Statement Law which states, "Cultural assessment" means a written evaluation conducted by a qualified</p>	<p>Rebecca Melendez</p>	<p>As part of the planning process, a Cultural Impact Assessment was developed by ASM Affiliates, Inc in February 2023 and included in Appendix H. The CIA was prepared in accordance with the</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>ethnographer as defined by the state historic preservation division to determine whether an action may have a significant effect on cultural practices, particularly native Hawaiian traditional and customary practices expressly protected under article XII, section 7, of the state constitution. "Cultural impact assessment" means an ethnographic study prepared in accordance with the rules adopted pursuant to this chapter by a qualified ethnographer as defined by the state historic preservation division, which shall disclose any cultural effects of a proposed action, including the cultural practices of the community and State, proposed measures to minimize adverse effects, and alternatives to the action and its cultural effects. Please reject this EIS because it has NO reports on Hawaiian or community cultural practices in the bay that will be affected during this development and after it is finished. Please reject this EIS because it has NO interviews with the Hawaiian people and community locals who use this bay, to learn how this bay is used daily by the Hawaiian people and locals in the bay, and under the Cultural Impact Statement Law this needs to be done to fully understand how this development will impact the Hawaiian people and community local's cultural practices. 2 Hawaiian cultural practices are canoe paddling and by creating this bungalow resort you will be taking away all the one man canoes that are at the bay to make room for tourists. This is not honoring Hawaiian canoe traditional practices and is going against the Cultural Impact Statement Law. Hawaiian cultural practices are also fishing and if you allow this bungalow resort to be developed there will be hundreds of tourists in the bay preventing Hawaiian fishermen from safely fishing without accidentally hooking a tourist who is swimming by. This goes against the Cultural Impact Statement Law because there won't be any room for fishermen to enjoy fishing at the bay because the bay is so small that having more paddle boards, more kayaks, more people swimming...will take away from Hawaiian cultural</p>		<p>regulatory requirements of HRS Chapter 343 as amended by H.B. No. 2895, H.D. 1 of the State of Hawai'i Twentieth Legislature and approved as Act 50 (2000). Act 50 requires consideration of a proposed Project's effects on cultural practices and resources as part of a State environmental review.</p> <p>The CIA was part of the broader KBMP planning process initiated by Kamehameha Schools between 2016 and 2019. This effort involved extensive consultation with stakeholders including cultural practitioners, lineal descendants, community groups, and organizations such as the Daughters of Hawai'i and the Keauhou Canoe Club.</p> <p>Cultural resources were identified as vulnerable due to incompatible uses, commercial overreach, and lack of long-term management, prompting a need for proactive strategies to ensure their protection and revitalization.</p> <p>In response, the KBMP includes a comprehensive set of strategies centered around the creation of a Heritage Management Corridor. This corridor is intended to reconnect these cultural sites through restored landscapes, interpretive walkways, and educational signage, promoting both the protection and public understanding of the area's cultural significance. Restoration plans include the visual and ecological rehabilitation of sites such as the 'Ahu'ula Cliff and Ho'okūkū Pond, the latter of which will be expanded and ecologically revived to support native species. The cultural impact assessment emphasized the importance of long-term stewardship and community engagement, noting that organizations like the Daughters of Hawai'i will continue to play a key role in caring for the Kauikeaouli birth site under a 75-year agreement with Kamehameha Schools.</p> <p>Please be aware that the KBMP does not include actions involving removal of canoe facilities or practices from the bay. On the contrary, the Project actively supports these practices by formalizing a dedicated space for traditional Hawaiian canoe activities within the open space corridor. Hawaiian canoe practices are recognized as significant cultural traditions and are fully</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>practice of being able to fish safely in Keauhou Bay and this goes against the Cultural Impact Statement Law. This EIS has not done any studies on "cultural practices of the community" and there are many baptisms and funeral services held in the bay and creating a bungalow resort in this area would create a tourists destination with hundreds of tourists all over this bay and baptisms and funeral services will become challenging to have for the community in this small historical bay because tourists will be there sunbathing everywhere and this will go against the Cultural Impact Statement Law for the community who have enjoyed this small historical bay to perform their cultural practices of baptisms and funeral services. Please reject Kamehameha Schools EIS because a bungalow resort development will go against the Hawaiian cultural practices, as well as the communities cultural practices and this goes AGAINST the Cultural Impact Statement Law SB #3152.</p>		<p>compatible with KBMP's goal of highlighting and preserving the historical and cultural heritage of the bay.</p> <p>An important objective of the KBMP is to enhance access to the bay, addressing historical challenges such as congestion, insufficient parking, and inadequate pedestrian and vehicular circulation. Consultations with residents highlighted these issues as significant barriers to practicing traditional ocean activities and customs. By improving shoreline access, the KBMP aims to support fishermen and other practitioners of traditional ocean rituals. The plan includes installing new pedestrian walkways, upgrading existing parking areas, developing additional parking spaces, and reopening Old Kona Road to alleviate congestion at the bayfront.</p> <p>Upon implementation of the Project's management goals, it is expected that cultural resources will be improved through preservation and stewardship measures and that opportunities for traditional practices will be expanded; thereby enhancing ancestral connection to place. The findings and recommendations from the Cultural Impact Analysis are detailed in Chapter 4.1 of the EIS.</p>
<p>KCC and KS share a common interest in the preservation of Keauhou Bay, the adjacent `āina and its unique heritage and the cultural practices associated with that heritage. Outrigger canoe paddling and racing are prominent features of those practices and that heritage. KCC's shared interest also includes the education of KCC's adult, youth, and keiki members in Hawaiian history and culture, specifically as it relates to Keauhou Bay and the nearby `āina. KCC also supports the KBMP as it relates to the management of Keauhou Bay and its surrounding `āina to prevent conflicts and enhance enjoyment among the users of Keauhou Bay. KCC is motivated and would be grateful to be an active participant in that effort.</p>	<p>Carolyn Leilani Carter</p>	<p>Kamehameha Schools appreciates the Keauhou Canoe Club (KCC) for its thoughtful and collaborative engagement in the planning process for the KBMP and its ongoing support towards preserving the unique heritage of the Bay and surrounding `āina. It is encouraging to know that KCC shares a common interest in protecting Keauhou Bay as a cultural and historical treasure, while recognizing the value of canoe paddling and racing as central to the Hawaiian cultural practices that are intrinsically tied to this sacred space. Kamehameha Schools looks forward to continued partnership with KCC towards these efforts.</p>
<p>While economic sustainability is essential to the applicant and the applicant has been very successful in increasing economic health and well-being, the most appropriate redevelopment actions for the wahi pana under the</p>	<p>Sierra Club</p>	<p>Kamehameha Schools agrees that the most appropriate redevelopment actions for the wahi pana are those centered on restoration, preservation, and the perpetuation of culture. These tenets were the driving force behind the KBMP and its</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
ownership and management of the applicant are ones in which restoration, preservation, and perpetuation of culture are the primary strategy.		management goals. Ensuring the long-term, sustainable management of the bay in perpetuity is the KBMP's primary objective. The economic model presented within the plan allows the lands at Keauhou to sustain themselves financially, with income generated through commercial activities directly supporting the protection and preservation of natural and cultural resources, maintenance of access and infrastructure, and the creation of educational and cultural opportunities central to Kamehameha Schools' mission.
The description of these zones contain a litany of damage and destruction, much of it occurring after plan approvals that were opposed by lineal and cultural descendants. This supports a proposed action in which the true nature of these properties as a wahi pana is recognized and additional tourism-related development does not occur is the most appropriate one.	Sierra Club	<p>The KBMP is designed to reorganize the uses and activities around the bayfront to better reflect the cultural heritage of the area and to support a more harmonious relationship between users, place, and purpose. Central to this reorganization is the concept of directing new growth to appropriate areas while preserving others. To resolve long-standing conflicts between incompatible uses, the KBMP proposes relocating commercial operations, particularly those that are currently situated near sensitive cultural sites near the shoreline, to more suitable areas above the 'Ahu'ula cliff and along Kaleiopapa Street. By moving these uses away from the bayfront and heritage zones, the plan protects sacred spaces and allows for cultural practices to thrive without interference.</p> <p>The KBMP proposes low-impact lodging that reflects Kamehameha Schools' commitment to natural and cultural resource stewardship and sustainable tourism. Rather than developing a large resort complex, as would be allowed under current resort zoning, the project is intentionally designed to limit its physical footprint and minimize disturbance to the land. This development approach seeks to honor the cultural significance of Keauhou, preserve its natural and historical resources, and support a vision of tourism that is deeply rooted in place and community.</p> <p>The lodging is not being created for the typical luxury traveler, but rather for visitors who value meaningful, educational, and culturally respectful experiences. In alignment with the values of Kamehameha Schools, the project prioritizes sustainability over profit and is seen as a key component in a broader sustainable tourism model. Importantly, revenue generated by the lodging is</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>necessary to help fund the long-term management, protection, and stewardship of the broader Keauhou property and its significant natural and cultural resources.</p> <p>Kamehameha Schools will select an operator for the lodging who aligns with its mission and vision for Keauhou, ensuring that operations remain consistent with the institution's values. Ultimately, the goal is not to maximize development, but to create a thoughtful, sustainable approach that supports both the land and the well-being of the Native Hawaiian community for generations to come.</p>
<p>The DEIS, Volumes I&amp;II contain numerous descriptions of sites that have been destroyed or damaged over the years, many of them fairly recently. A comprehensive list of sites that have been destroyed and their location should be presented in the DEIS. The circumstances that resulted in the destruction and/or damage should be presented. For instance, Site 1660 location of Site 1660 is not listed in Vol. I. The date and circumstances surrounding the destruction of the Kamau'ai Heiau are not presented</p>	<p>Sierra Club (Moku Loa Hawaii Island)</p>	<p>The landscape around Keauhou Bay has been substantially altered due to changes in land use and development over time, leading to the loss of many archaeological sites previously documented in the area. The Cultural Impact Assessment (Appendix H) provides a good faith effort to record archaeological sites known historically, although the specific circumstances resulting in their destruction or damage are often unknown. Additionally, inadequate historical record keeping has complicated efforts to pinpoint exact locations of certain culturally significant sites, such as Kamau'ai Heiau, whose precise location remains uncertain and has varied in historical accounts, as summarized in Table 7 of the assessment.</p> <p>An Archaeological Reconnaissance Survey (ARS) and Site Condition Update conducted by Haun &amp; Associates in May 2022, included in Appendix I, reviewed existing archaeological and historical documents related to the Project Area and its surroundings. Haun &amp; Associates revisited the area to relocate previously recorded sites, assess their current condition, identify potential natural or anthropogenic threats, and document newly discovered sites for significance evaluation and appropriate treatment, such as preservation or data recovery. A comprehensive summary of these findings from the ARS is detailed in section 4.1 of the Environmental Impact Statement (EIS).</p>
<p>In 2009, the State Historic Preservation Board refused to delist the Pua'u II complex in Wai'aha from the state and National Register of Historic Places because it still existed</p>	<p>Sierra Club</p>	<p>Kamehameha Schools understands the significance of the 2009 decision made by the State Historic Preservation Division regarding the Pua'u II complex in Wai'aha. Although the historic heiau that</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
based upon Hawaiian cultural beliefs. This determination provides further justification for this wahi pana to be redeveloped and restored in a manner consistent with the traditional and customary practices associated with this wahi pana.		once stood within the vicinity of Keauhou Bay are no longer physically present and their precise locations remain unknown, Kamehameha Schools recognizes the continued importance of honoring their intangible spiritual presence. To achieve this, Kamehameha Schools is implementing the KBMP, which aims to reorganize the bay area by establishing a cultural heritage corridor between the shoreline and the 'Ahu'ula cliff. This plan emphasizes reverence for both tangible and intangible cultural sites through active preservation initiatives, educational efforts, and cultural programming, ensuring that the sacred essence of these sites continues to be respected and remembered despite the physical loss.
Appendix C, Cultural Impact Assessment, April 2022 (Revised November 2022): CIA only contains four interviews. The CIA consultant outreach effort only met minimal requirements for public notice and outreach. CIA consultant did not reach out to individuals and organizations that participated in 4/12/22 EISPN Scoping Meeting and/or submitted EISPN comment letters prior to the CIA's publication in November 2022 who identified themselves in as being parties related to the project as cultural/lineal descendants or traditional and customary practitioners.	Sierra Club	<p>This Cultural Impact Assessment was conducted in compliance with the Environmental Review Program (formerly known as the Office of Environmental Quality Control [OEQC]) Guidelines for Assessing Cultural Impacts, adopted by the Environmental Council, State of Hawai'i, on November 19, 1997 (OEQC 1997).</p> <p>To identify individuals knowledgeable about traditional cultural practices and/or uses associated with the current project and study areas, three public notices were published. All notices contained (a) locational information about the project area, (b) a brief description of the proposed project, and (c) contact information. A public notice was submitted to the Office of Hawaiian Affairs (OHA) on January 13, 2022, for publication in their monthly newspaper, Ka Wai Ola. This notice was published in the February edition of Ka Wai Ola. No responses were received from this public notice. Two additional notices were published on January 23, 2022, in two local newspapers, the Hawaii Tribune-Herald and the West Hawaii Today. Similarly, no responses were received from these notices.</p> <p>Additionally, ASM staff attempted to contact twelve individuals via email and/or phone. These individuals were identified as persons who were long-time residents of the area and believed to have knowledge of past land use, history, or cultural information. Of the twelve people contacted, five agreed to participate in this study. Of</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		the five, only four were able to review their interview summary and provided written or verbal approval for inclusion in the CIA.
<p>This site [Site 24215] was destroyed “from recent bulldozing activities”. Did the applicant submit a permit for this activity? If not, has the applicant taken action against the bulldozer operator? The destruction of this site and many others provides further support for a proposed action that ho’oponopono the destruction in this wahi pana..</p>	Sierra Club	<p>A 1.08 acre parcel corresponding to TMK (3) 7-8-012:098 was the subject of an AIS completed in 2004 by Haun and Associates for the Kamehameha Investment Corporation. The TMK parcel forms a portion of the 2.6-acre Kaimuki Zone.</p> <p>The eastern portions of the surveyed parcel had been bulldozed and at the time were occupied by the Hawaiiana Boat Rental facility. The maintained lawn adjacent to the parcel to the south was planted with coconut trees along its northern boundary and a large, mortared stone foundation for a sign was located at its eastern end. An area of pushed boulders and soil was located along the boundary between the lawn and the surveyed area. This evidence of ground disturbance would suggest that most of TMK (3) 7-8-010:049 has been bulldozed.</p> <p>The 2004 survey identified two historic properties containing six distinct features. SIHP Site number 50-10-37-24215 consists of a small, modified lava overhang, while SIHP Site number 50-10-37-24216 is a post-contact complex composed of two stacked stone walls, a modified outcrop, a retaining wall, and a walled overhang.</p> <p>Site 24216 was interpreted as forming part of a post-Contact house lot. The structures do not appear on the 1928 USGS Quadrangle of the area but do correspond to two structures depicted on Kekahuna’s 1954 map of Keauhou Bay. According to Kekahuna’s map, this property was owned by Mrs. E. P. Hodgins. The house itself, which appears to have been constructed at some time between 1928 and 1954, was torn down in the late 1990s. Construction related to the Hawaiiana Boat Rental facility and its associated driveway and parking area likely demolished portions of features associated with the site. The specific circumstances surrounding the condition of the site prior to 2004, as well as details regarding any permits or approvals obtained to carry out Hawaiiana Boat Rental construction activities, are currently unknown.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>The report of the 2004 survey noted that mapping, written descriptions, photography, and test excavations conducted at both SIHP Site 50-10-37-24215 and SIHP Site 50-10-37-24216 adequately documents their features. No further archaeological work was recommended as both sites were determined to be significant solely for their information content and the survey had adequately documented them. The two identified sites were evaluated as not warranting preservation (Haun and Henry 2007:30). The 2007 report of the 2004 survey was reviewed and accepted by the Hawai'i State Historic Preservation Division (SHPD).</p> <p>As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.</p>
<p>The DEIS should provide further information about the destruction of the cemetery, the impact on iwi kupuna, and what, if any, mitigation occurred. The destruction of these sites and many others provides further support for a proposed action that ho'oponopono the destruction in this wahi pana and that further resort- and tourism-related development is inappropriate.</p>	<p>Sierra Club (Moku Loa Hawaii Island)</p>	<p>The circumstances involving the Kau Cemetery are not well documented; however, it is likely that the cemetery was decommissioned during the implementation of the Kuleana Acquisition Program. In 1964, the Keauhou Development Corporation (KDC) initiated this program, resulting in the displacement of Native Hawaiian 'ohana from lands they owned at Keauhou Bay to facilitate future planned development. This process included the exhumation and relocation of iwi (ancestral remains) from the cemetery to another site. Kamehameha Schools acknowledges the pain and ongoing sense of displacement caused by these historical actions and recognizes the importance of healing through an honest acknowledgment of past wrongs. The KBMP aims to support this healing by reconnecting 'ohana to the 'āina through improved access, new place-based cultural and educational programming, and long-term stewardship of the area's natural and cultural resources, ensuring a more culturally sensitive and inclusive future for Keauhou Bay.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>DEIS Appendix D: “Archaeological Reconnaissance Survey” is improperly titled. Appropriate legal title is “Archaeological Inventory Survey”. Report has no table of contents or page numbers and is improperly presented.</p>	<p>Sierra Club                      (Moku Loa Hawaii                      Island</p>	<p>The type of document presented in Appendix I is an Archaeological Reconnaissance Survey (ARS) and Site Condition Update. This document was conducted by Haun &amp; Associates in May 2022, and reviews existing archaeological and historical documents related to the Project Area and its surroundings. Haun &amp; Associates revisited an area where a prior Archaeological Inventory Survey (AIS) was conducted in 2010. The purpose of the ARS and Site Condition Update was to relocate previously recorded sites, assess their current condition, identify potential natural or anthropogenic threats, and document newly discovered sites for significance evaluation and appropriate treatment, such as preservation or data recovery.</p> <p>The ARS and Site Condition Update is not an AIS and is not intended to meet the requirements of Hawai‘i Administration Rules (HAR) 13-276 for AIS surveys and reports.</p> <p>The ARS and Site Condition Update provides a Table of Contents and a list of figures and tables prior to the Introduction section. The document has been update to include page numbers in the FEIS.</p>
<p>Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay? Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? Because they will have employees with cars, guests with cars, visitors with cars and this would range at times at least over 200 cars or more, parking above Keauhou Bay causing serious car population because of all these added cars right next to the bay. A Resort Development WILL Increase Traffic on Already Severly Trafficed Roads. Where are the traffic study reports for this EIS because with 150 rooms comes over 150 cars because you must include employee cars, as well as visitors</p>	<p>Donald                      Robert Berger                      Stephen                      Goudreau                      Sara Irwin                      Goudreau                      Lucia Kaplan                      Rebecca                      Melendez                      Sherina Ong                      Roslyn Patrick-                      Sunnes</p>	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.</p> <p>The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. The EIS indicates that traffic during peak periods will be carefully monitored and that improvements to local circulation are included as part of the Project. Design enhancements along Old Kona Road, such as dedicated pedestrian pathways and improved wayfinding, will support better traffic flow, while additional parking areas off Kamehameha III Road and Kaleiopapa Street are being provided to help alleviate congestion near Keauhou Bay.</p> <p>Parking supplies have been sized to accommodate demand to reduce the potential for parking on shoulders and other areas that cause potential safety issues. Additionally, new lots for parking and</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>for the people staying in the resort, and what if the guests have more than one car? The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side. Allowing another resort to be developed will bring more cars that will lead to a lot more traffic that the island cannot handle.</p>	<p>Deborah Sevy                      Mayari Sherina Ong                      Lisa Thatcher                      David Hill                      Kaleihua Kamaka                      Kellie Kilcuo                      William Lim                      Jenni Lund                      Alicia Morrier                      Belinda Pate                      Jo Quinn                      Jason Rigmaiden                      Bryn Stites                      Wim Verkaok                      Jyn Watson                      Celia Murry                      Riley Reynolds                      Sharron Rudolph                      Curt and Ellen Winningham</p>	<p>boat trailer storage will be provided off Kamehameha III Road and Kaleiopapa Street. These lots will increase the overall availability of parking. Both the new retail center and the low-impact lodging will have their own designated parking stalls. Implementation of the Project is anticipated to result in beneficial impacts on parking and access at the Bay.</p> <p>Kamehameha Schools understands the concern that Hawai'i Island faces significant challenges with traffic congestion and limited infrastructure in certain areas. The proposed project has been planned to mitigate its potential impact on local traffic flow and the environment.</p> <p>It is important to recognize that vehicles can contribute to the production of contaminants. However, based on the mobility analysis, the anticipated increase in traffic volume will result in a negligible increase in pollutants. To maintain environmental protection, all roads and drainage systems will be constructed in full compliance with State and County standards, designed to effectively manage stormwater runoff and maintain water quality. These measures will help mitigate potential environmental impacts while supporting responsible development.</p>
<p>This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a serious negative impact in Keauhou Bay.</p>	<p>Danica Ann Barretto                      Susie Jenkins</p>	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.</p> <p>The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the proposed</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
	Nawahine Kahoopii Veronique Leferink Ellen Manko Heather Masunaga Jasmin McCracken Michelle Melendez Koohan Paik-Mander Alexis Russel Umberto Taormina Lisa Thatcher Sandra Vacchio	<p>project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.</p> <p>The EIS indicates that traffic during peak periods will be carefully monitored and that improvements to local circulation are included as part of the project. Design enhancements along Old Kona Road, such as dedicated pedestrian pathways and improved wayfinding, will support better traffic flow, while additional parking areas off Kamehameha III Road and Kaleiopapa Street are being provided to help alleviate congestion near Keauhou Bay.</p>
<p>Reason #4 a Resort Development WILL Increase Traffic The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side. Allowing another resort to be developed will bring more cars that will lead to a lot more traffic that the island cannot handle, please read the articles below by different NEWS companies that prove this point. With more tourists comes more accidents, more traffic, and more traffic deaths. The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments. Please read this article because what it says about Oahu is the</p>	Sarah Dahm Melanie Diehl Claudia Kane Rebecca Melendez Heather Tribolet Donna Cherrier Riley Reynolds Sharron Rudolph	<p>Kamehameha Schools understand the concern that Hawai'i Island faces significant challenges with traffic congestion and limited infrastructure in certain areas. The proposed project has been planned to mitigate potential impacts on local traffic flow and the environment.</p> <p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.</p> <p>The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the Project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>same for Big Island. There are 2 developments already on Alii Dr. being built as of today, and more are scheduled for this road in the near future, and Alii Dr. and Queen K HWY are the roads Kamehameha Schools Bungalow Resort will be using if approved and they are already seriously congested. These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow already.</p>	<p>Curt and Ellen Winningham</p>	<p>According to data from the Hawaii Department of Transportation (2025), while the number of island wide traffic fatalities through April 1, 2025 (10) is lower compared to the same period in 2024 (14), the number of annual fatalities has varied between 15 and 33 between 2018 and 2024 with no consistent trend up or down.</p> <p>Increased traffic volume does not necessarily correlate to an increase in traffic fatalities because many factors contribute to vehicle crashes. Per Hawai'i Department of Transportation, Highways Program Status data, five fatal crashes occurred within a two-mile radius of the Project Area between 2013 and 2025, with two on Ali'i Drive to the north and the remainder on Kuakini Highway to the east. Of these five fatal crashes, all involved drugs or alcohol as a primary contributing factor.</p> <p>The Project includes various traffic mitigation strategies and design features intended to reduce congestion, enhance safety, and support the area's existing infrastructure.</p>
<p>As a nearby resident of this proposed project, I am strongly against its continuation. Direct descendants of King Kamehameha have stated their opposition to this during previous public meetings. Ali'i Drive and Kaleiopapa St. traffic is already noisy and dangerous as drivers violate speed limits continuously.</p> <p>Please stop this project. It is not needed, will over populate an area already ill-equipped to handle traffic noise and volume, and destroy the tranquility of the area. Thank you.</p>	<p>Lisa Sterritt</p>	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.</p> <p>The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the Project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.</p>
<p>From what I can see now this plan is far too big. We already face traffic problems from the tour boat operators that are overusing the Bay. Too many tourists speeding up and down Kam 3 to get to the tours. Now with your proposed plan to expand development the traffic will only become worse. I saw how big you parking lots are and worry very much about how many people this is going to put in our very small bay. Way too much parking, way too many tour operations, and</p>	<p>Paul Koenigshofer</p>	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.</p> <p>The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the Project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
way too much parking and pavement. Please do not let it happen like this.		The new parking lots located off Kamehameha III Road and Kaleiopapa Street are designed to reduce the pressure on existing parking near the bayfront. Parking supplies have been sized to accommodate demand to reduce the potential for parking on shoulders and other areas that cause potential safety issues.
It is inappropriate because traffic and parking is very bad.	Jun Sogi	Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.  The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the Project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.
Setting up an educational feature on the birthplace site is warranted but bringing hundreds more tourists and vehicles to the area will be catastrophic. Please deny permission for this new resort development	Joyce Barbarich	Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.  The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the Project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.
Has there been a detailed traffic study for the increase in cars that will be added to this already severely traffic area?	Rebecca Melendez Robert Gay	Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.  The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the Project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.
The development plan including the re-routing of roads near the bay will greatly increase traffic and traffic congestion in an area that is already heavily trafficked. Such an increase in traffic will decrease the overall quality of living in the area and increase traffic safety concerns and problems.	Jeffery and Leann Malison	Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.  The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the Project layout

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.
Resort Access Traffic Light I understand easy resort access for your guests may be a priority, but don't take this too far. Limit vehicular resort access to the intersection of Old Kona Road and Kaleiopapa Street. At this new paved intersection, install a traffic light that is triggered by pressure plates on Old Kona Road's stop line. A pressure-plate controlled stop light will manage traffic at the intersection of Old Kona Road, Kaleiopapa Street and Ehukai Street, which would serve the Outrigger Resort, Keauhou Pier, as well as the proposed Keauhou Bay front retail and cliff top resort.	Michael Herbert	<p>Mahalo for the suggestion. A substantive goal of the Project is to improve overall traffic conditions and safety.</p> <p>Kaleiopapa Street is owned by the County and traffic control infrastructure would be under their purview. Kamehameha Schools appreciates your recommendation and will include it in the ongoing discussions regarding traffic management strategies for the Project.</p>
It is so obvious that the plan would add traffic, congestion, people, pollution and trash in addition to taxing overburdened water treatment facilities.	Amy Gillum	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.</p> <p>The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the Project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.</p> <p>The Project will implement best management practices (BMPs) to minimize pollution and debris generated at the site. This includes controlling dust, dirt, and stormwater runoff, as well as providing adequate waste disposal systems for both construction and operational phases.</p>
Generally, any development of this size in this area would bring so much more traffic on the streets surrounding the area which they are not currently able to handle. I live less than 100 yards from Alii and Kaleiopapa intersection where the traffic noise is already unbearable during the daytime and some nights. From ten PM to 4:30 AM, we have some quiet time. As you know, Kaleiopapa has a steep incline at the top where people need to rev their engines to get up. The trucks are the worst going up and down that steep hill . With a "Resort" the truck traffic would be increased 20 or	Cheri Uno	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.</p> <p>The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the Project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.</p> <p>Vehicle drivers exceeding the speed limit is an existing enforcement issue, and speeding will not necessarily be</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>more times a day from making deliveries to the resort, restaurants/bars and shops. Then, there are the tourist staying there. I'm assuming with 150 units that would be 300 people (conservative estimate since people usually come with family of 4 not just 2 people as honeymoon couples). They will be coming and going all day long up and down the streets. There is not much for them to do right here. It is off to volcanos, water falls, botanical gardens, zip lines and snorkel beaches. This area cannot handle that much traffic – I prefer the smell of fresh air to that of hundreds of cars/trucks exhaust. I also frequently hear the screeching of tires from people not knowing the area and missing the turn for Kaleiopapa and at least once a month a near miss accident. The speed limit on Alii is 35 but most people travel about 45 or more. There are two condo complexes on Alii with blind driveways on to the street because of hills and curves on Alii – Country Club Villas and Keauhou Akahi. They have a hard time now getting out of their complexes now. With increased traffic, this would make it impossible without endangering their lives . This is going to cause noise, air and traffic pollution to Keauhou area. Current infrastructure cannot handle a resort here.</p>		<p>exacerbated by the addition of vehicles from this project or other development in the area.</p>
<p>Has there been a detailed traffic study for the increase in cars that will be added to this already severely traffic area? the island has severe traffic issues already with increased death tolls rising, and a resort development in Keauhou Bay will totally increase even more traffic in these already severely congested traffic areas.</p>	<p>Donna Cherrier</p>	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.</p> <p>The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the Project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.</p>
<p>Reason #4 a Resort Development WILL Increase Traffic on Already Severly Trafficed Roads The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side. Allowing another resort to be developed will bring more cars</p>	<p>Donna Cherrier</p>	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.</p> <p>The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the Project layout</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>that will lead to a lot more traffic that the island can not handle, please read the articles below by different NEWS companies that prove this point. This NEWS article by Hawai'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year. The startling statistics show a dramatic increase in the number of year-over year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Please watch their video on their link below because it is a professional report on Big Island traffic problems. With more tourists comes more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state, This time last year Hawaii island was at five traffic deaths, as of April 1, 2024, they're at 14. Seven of which happened in the last two weeks... Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes. "We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments. Please read this article because what it says about Oahu is the same for Big Island. The traffic problems they talk about are the same issues here on Big Island, and this article also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." There are 2 developments already on Alii Dr. being built as of today, and more are scheduled for this road in the near future, and Alii Dr. and Queen K HWY are the roads Kamehameha Schools Bungalow Resort will be using if approved and they are already seriously congested. These roads have the exact same traffic</p>		<p>is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.</p> <p>According to data from the Hawaii Department of Transportation (2025), while the number of island wide traffic fatalities through April 1, 2025 (10) is lower compared to the same period in 2024 (14), the number of annual fatalities has varied between 15 and 33 between 2018 and 2024 with no consistent trend up or down.</p> <p>Increased traffic volume does not necessarily correlate to an increase in traffic fatalities because many factors contribute to vehicle crashes. Per Hawai'i Department of Transportation, Highways Program Status data, five fatal crashes occurred within a two-mile radius of the Project Area between 2013 and 2025, with two on Ali'i Drive to the north and the remainder on Kuakini Highway to the east. Of these five fatal crashes, all involved drugs or alcohol as a primary contributing factor.</p> <p>The Project includes various traffic mitigation strategies and design features intended to reduce congestion, enhance safety, and support the area's existing infrastructure.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
congestion as Hilo, with the exact same problems. Traffic is extremely slow already.		
With another resort the amount of people in this bay will fully increase.	Rebekah Macquarrie	Kamehameha Schools understands your concerns about the increase in visitors and the potential strain on Keauhou Bay. The KBMP has been designed to strategically redirect growth and commercial activities away from sensitive shoreline and cultural areas to appropriate inland locations above 'Ahu'ula cliff and along Kaleiopapa Street. The proposed lodging is intentionally designed as a low-impact facility catering to visitors who prioritize meaningful cultural and educational experiences. The Project intentionally limits the lodging's physical footprint compared to what current resort zoning would otherwise permit. Through this approach, the presence of additional lodging units aligns with the goals of environmental sustainability and cultural stewardship, while revenues generated directly support ongoing conservation efforts and responsible management of the area's resources.
Traffic Impacts the Project proposes to build a resort with 43 multi-bedroom houses, commercial kiosks, a cultural center, a commercial/retail center, as well as a road connecting the north and south ends of the Bay. This will result in a large amount of vehicle trips per day, however there is no study analyzing traffic impacts. There is also no evidence of what the amount of reduction on the existing roadways would be with construction of a new road. The DEIS also fails to address how the Project would mitigate increased traffic impacts. Lastly the DEIS claims that the Project will reduce traffic impacts but does not provide any substantiation or studies to support its conclusions	Jennie Shield	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.</p> <p>The Mobility Analysis Report concluded that the Project would not result in significant traffic impacts. Although the Project is estimated to generate approximately 1,928 new daily weekday vehicle trips, the construction of Old Kona Road, between Kamehameha III Road and Kaleiopapa Street, is expected to significantly improve overall access and connectivity, mitigating the potential for congestion on existing roads. This roadway improvement, along with a shared-use path for bicycles and pedestrians, will enhance multimodal connectivity, reduce reliance on current roadway alignments, and consequently decrease traffic burdens in the vicinity.</p> <p>Traffic analysis indicates that intersections in the area will continue to operate at desirable levels (LOS D or better) even with the increased traffic volumes forecasted for 2035, indicating that no substantial shifts or additional congestion would result from the Project. The report highlights specific mitigation measures, including internalizing traffic flows within the development and</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>providing formalized off-street parking to reduce intrusion into surrounding neighborhoods.</p> <p>These conclusions are substantiated by detailed analyses documented within the report, which utilize standard methods from the Highway Capacity Manual and account for future growth scenarios to ensure accurate projections.</p>
<p>To whom it may concern, As a condo owner on Kamehameha III Road... I object to further development of Keauhou Bay...for all the scientific reasons listed below and for the increased traffic ( read pollution and quality of life) on Kam III, ... and the concern that there is not plan for a route should we have another tsunami.</p>	Deborah Green	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.</p> <p>The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the Project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.</p> <p>The KBMP is designed to mitigate tsunami threats by improving connectivity and emergency access through infrastructure enhancements. The construction of Old Kona Road, linking Kamehameha III Road and Kaleiopapa Street, provides a crucial alternative evacuation route, significantly enhancing emergency responsiveness and accessibility during tsunami events. In the event of a tsunami or other natural disaster, the Project is designed to avoid creating barriers to emergency access or hindering evacuation routes.</p>
<p>The Project Provides No Support Of How It Will Alleviate "Congestion" Use Conflicts First, the EIS creates a straw man argument that Keauhou Bay suffers from "congestion" and conflicts with incompatible uses. There is no supporting study analyzing the existing number of users on a daily, weekly, monthly and/or annual basis nor the type and timing of the usage. Without such an analysis, the statement that there is a problem with "congestion" and/or "incompatible uses" is simply unsupported by any evidence. There are one or two photographs depicting people standing around the publicly owned dock area, which as people are congregating in publicly owned spaces the report fails to explain how the</p>	Jeff Caufield	<p>Appendix M to the DEIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The report includes forecasted traffic conditions with the implementation of the Project. The traffic analysis shows that the addition of project-generated traffic would not result in any significant roadway operations impacts under typical peak hour conditions.</p> <p>As part of the planning process for the KBMP, Kamehameha Schools engaged with a wide range of stakeholders and has incorporated community concerns, including firsthand observations</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Project will prevent the public from congregating on publicly owned land. There is also Figure 3-13 which depicts a picture of the bay with ZERO people present, which directly contradicts any claim of congestion. Other than reducing access to publicly owned space, the project provides no analysis of how it will reduce the existing number of users nor the purported "incompatible" uses. Without underlying research, study and analysis the statements that the project would reduce "congestion" and/or use conflicts is unsupported and the EIS must be rejected on this basis alone. In fact, it would be reasonable to conclude that the project would substantially increase congestion and use conflicts at Keauhou Bay. For example, with the construction of 43 housing structures containing 150 housing units, which will each likely have 2 cars, with a minimum average of 4 car trips per vehicle per day, the housing units alone will likely add OVER 600 vehicles trips per day. (Based on my observations, the housing units alone will more than likely, on their own, double or triple the amount of traffic in the area.) Plus, you are adding hundreds of new visitors staying in the new housing on the bay, which presumably those new visitors will visit and use the bay. With the proposed cultural center, commercial center, commercial kiosks and employees/workers at the new proposed resort, there obviously will be a substantial increase in the number of additional vehicle trips per day. I'd note that the nearby Pu'uhonua o Hōnaunau National Historical Park ("City of Refuge") reports over 300,000 visitors per year to the site and cultural center. (Volcanoes National Park attracts over a million visitors per year.) Will the new proposed cultural center (located substantially closer to the City of Kailua-Kona so it will be much easier for visitors to access) attract a comparable number of visitors per year to the City of Refuge? The EIS provides no projections based on increased numbers from the cultural center. Even assuming the new cultural center only attracts 100,000 visitors per year (which is less than 33% the number that visit the City of Refuge),</p>		<p>about pedestrian safety, traffic congestion, and the impact of incompatible activities at the bayfront.</p> <p>Stakeholders highlighted several pressing issues, notably the absence of sidewalks along Kaleiopapa Street, which forces pedestrians to walk on the roadway alongside vehicle and boat trailer traffic. The limited turnaround space at the end of Kaleiopapa Street further exacerbates congestion. It has also been cited that when cultural ceremonies occur, such as those at the Kauikeaouli birthsite, participants often occupy the roadway, leading to conflicts with vehicular traffic, noise, and a diminished experience for those involved in spiritual or ceremonial observances.</p> <p>The KBMP is designed to address these challenges through its comprehensive management strategies. These include the proposed development of pedestrian-oriented infrastructure and improved circulation patterns to enhance safety and efficiency. Importantly, the plan proposes reactivating the historic Old Kona Road as a throughway to better manage traffic flow and redirect it away from sensitive cultural areas.</p> <p>A significant component of the project also includes increasing parking capacity at the existing northern parking lot as well as providing more parking spaces than required at the new commercial center. This will relieve pressure on informal roadside parking. Pedestrian pathways will offer direct, safe access from the parking area to community spaces along the bayfront. Clear signage, well-marked crosswalks, and other visual cues will further support intuitive wayfinding and discourage walking along the roadway.</p> <p>The Project will comply with County parking requirements as required. Please refer to EIS Section 3.2.5 for more information on parking and pedestrian circulation.</p> <p>It is important to clarify that the KBMP does not propose any new housing as your comment suggests. Please refer to Chapter 3 of the EIS for a detailed description of the Project.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>that equates to nearly 30,000 additional vehicles trips alone per year. (Note: the City of Refuge Parking lot has 75 parking spots plus there are usually 20 plus cars parked outside the gate, meaning that with staff there are 100 plus parking spots associated with the City of Refuge that are frequently full. The Project proponent has ZERO parking spots in the EIS for the "cultural center" beyond the existing parking.) The kiosks at Alii Marketplace have approximately 40 parking spots that are largely full most of the time. Accordingly, one would anticipate the "kiosks" at the Project will require comparable parking (if not more because kayak and SUP rentals are likely going to stay longer than visitors to Alii Marketplace.) Accordingly, it may be reasonable to conclude that the Project will add a demand for upwards of 140 parking spots to the existing parking demands. There is no study of the existing parking requirements not assessment of the future parking requirements should the project be implemented. Plus, the EIS identifies the launch ramp area as the area of purported greatest congestion and yet the project proposes to ADD substantial numbers of visitors and vehicles to the area of alleged greatest congestion. The launch ramp cue (i.e. greatest congestion and yet the project proposes to ADD substantial numbers of visitors and vehicles to the area of alleged greatest congestion. The launch ramp cue (i.e. Vehicles/trailers waiting to launch and/or pull-out boats) is noted as an area of greatest congestion. The cultural center is proposed to be built in the area of greatest congestion. The Project fails to explain how adding thousands (if not tens of thousands) of more people and vehicles to the area identified as having the greatest congestion will be reduced by the Project. Particularly, the EIS fails to contain projections as to the increase in number of visitors and vehicles to the area and the extent to which the Project will impact those levels. (Note: With 43 houses and 150 units being built on the bay likely housing 250+ tourists each day plus commercial kiosks with kayak and SUP rentals, the bay daily usage will also likely substantially</p>		<p>Section 4.6 of the EIS addresses Biological Resources. A <i>Natural Resource Assessment</i>, provides detailed information on the biological conditions of Project Area and is included as Appendix K of the EIS. The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p> <p>Environmental stewardship is also expressed through restoration of native vegetation, landscape design, and preservation of natural water features such as springs and anchialine ponds, which support unique ecological systems. Long-term management of these resources is made possible through a sustainable tourism model that uses revenue from low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>While Kamehameha Schools does not have jurisdiction over the enforcement of ocean safety regulations, it may contribute to ocean safety and minimizing conflicts between boaters and swimmers through educational initiatives and strategically placed signage.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>increase and yet there is no estimate of that impact.) There is NO analysis of the impact on local flora and fauna from the likely increase usage of the bay arising from the project. Moreover, with the addition of SUP and kayak rentals on the bay, the Project is likely to increase conflicts with the existing boating usage of the bay for ingress and egress to the loading ramp and dock area. There is no analysis of the future impacts on existing uses of the bay with the addition of rental kayaks and SUP to the bay. For the foregoing reasons, the EIS must be rejected for failing to provide supporting evidence and documentation.</p>		
<p>This is a supplement to my prior comments on the Draft EIS. My comment regarding the "traffic" study and the need to conduct a traffic study should be clarified. I do understand that a limited traffic study was conducted in September 2021 at intersections near the Project. However, that was far from the comprehensive traffic study needed. First, the "study" was of very limited hours and based on the assumption that highest traffic loads would only occur during limited time periods without taking into consideration the usage of the bay. Second, the traffic study was conducted in late September, which has the lowest number of tourists on island and would consequently have the fewest number of vehicle trips. One would suspect that the time period that was selected was to pick the period of time with the fewest number of vehicle trips rather than during busy and/or peak periods of the year. (In many instances, some of the snorkel boats don't even run two trips per day due to the lack of tourists in late September and the boats that do run are far from full.) A traffic study should be conducted during peak periods such as the June/July time period when the snorkel boats, fishing charters and other vehicle uses are at the maximum. Third, the traffic study would, without citation to any evidence, randomly consider the proposed cultural center to be similar to a "library" and assign a limited number of trips. As there are nearby cultural centers such as the City of Refuge, which receives 370,000</p>	<p>Jeff Caufield</p>	<p>It is important to clarify that the KBMP does not propose any new housing as your comment suggests. Please refer to Chapter 3 of the EIS for a detailed description of the Project.</p> <p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.</p> <p>The Mobility Analysis Report concluded that the Project would not result in significant traffic impacts. Although the Project is estimated to generate approximately 1,928 new daily weekday vehicle trips, the construction of Old Kona Road, between Kamehameha III Road and Kaleiopapa Street, is expected to significantly improve overall access and connectivity, mitigating the potential for congestion on existing roads. This roadway improvement, along with a shared-use path for bicycles and pedestrians, will enhance multimodal connectivity, reduce reliance on current roadway alignments, and consequently decrease traffic burdens in the vicinity.</p> <p>Traffic analysis indicates that intersections in the area will continue to operate at desirable levels (LOS D or better) even with the increased traffic volumes forecasted for 2035, indicating that no substantial shifts or additional congestion would result from the Project. The report highlights specific mitigation measures, including internalizing traffic flows within the development and providing formalized off-street parking to reduce intrusion into surrounding neighborhoods.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>visitors per year, the vehicle trips selected should be based on nearby real world numbers. Fourth, a traffic study should also account for the yearly variation in usage of the bay. During the summer months, including September, because it gets darker later the loading/unloading of the manta snorkel boats generally does not occur until after 6:30 p.m. However, during the winter months, the loading/unloading of the manta boats occurs around 5-6 p.m. (Manta trips occur after dark.) The manta snorkel trips typically have, a minimum of 200-300 guests (roughly 100 vehicles) at a single time. That puts roughly 200-300 extra vehicle trips through the stoplights etc... during what the traffic study considers to be peak periods that were not accounted for in the current study, nor apparently mentioned. (One wonders why the authors failed to address seasonal traffic patterns nor season variations in usage other than picking the lowest usage period for their purported study.) Further, with 150 rooms, it is likely that there will be roughly 150 vehicles, plus staff vehicles from the resort (30+). Accordingly, you are likely looking at a minimum of 4-6 trips per day per vehicle meaning that you are probably looking at 600-900+ vehicle trips per day from the resort alone that needs to be considered. (Seasonally, the number of trips would vary with darkness as visitors would presumably go out to dinner earlier when it gets dark earlier and may impact peak traffic.) Finally, the traffic study fails to analyze the impact on traffic at and/or around the boat ramp increase and particularly the impact of channeling the pedestrian traffic across and active boat ramp. This is likely to cause localized congestion at the ramp.</p> <p>2. The Report Fails To Analyze Traffic Impacts As discussed supra, the Project proposes to build a resort with 43 housing structures with 150 housing units (Note: the term "bungalow" seems to be an attempt to mislead the public in to believing that what is being proposed are not in fact large multi-bedroom homes), commercial kiosks, cultural center and commercial/retail center. It also proposes to build a</p>		<p>These conclusions are substantiated by detailed analyses documented within the report, which utilize standard methods from the Highway Capacity Manual and account for future growth scenarios to ensure accurate projections.</p> <p>The intersection analysis study time periods correspond to the times when traffic volumes on the road are typically the highest. The traffic counts used in the mobility analysis were collected at the time the analysis was initiated, and the month the counts were conducted was not selected based on the time of year.</p> <p>A comparison of historic traffic data from the State of Hawaii Department of Transportation shows that September traffic volumes are roughly 7% lower than July volumes. Even if the volumes in the traffic analysis were increased by that amount, all of the study locations would still operate at a desirable level.</p> <p>The use of library trip rate was based on engineering judgement and accounts for a facility that has a more even distribution over the course of a day.</p> <p>The additional trips associated with the manta snorkel boats in the summer months occur well after PM peak hour traffic conditions, when volumes decrease substantially. As such, operations at the study intersections would likely be the same as or better than reported in the mobility analysis.</p> <p>Regarding the visitor trips, the trip rate accounts for both visitor and employee vehicle trips, as well as the temporal distribution of trips during the day. The number of trips at these types of facilities accounts for all types of trips, including staying at the low-impact lodging site all day, making multiple trips, and making one outbound trip and one inbound trip after completing multiple visits to sites elsewhere.</p> <p>The Project does not involve channeling pedestrian traffic across an active boat ramp as stated. The KBMP includes significant pedestrian improvements along Kaleiopapa Street aimed at enhancing safety, connectivity, and reducing congestion. By reopening Old Kona Road, the Project establishes a crucial link</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>new road connecting the north and south ends of the bay. As discussed supra, the Project will likely result in a minimum of hundreds, if not thousands, of additional vehicle trips per day. There is no study of the what the current number of vehicle trips per day are on the surrounding public roads, the level of impact of the existing stop lights nor the number of vehicles that travel from the south-north and/or north-south on the existing roadways that would conceivably use the new road. Accordingly, there is no evidence of what, if any, the amount of reduction on the existing roadways would be by the construction of a new road. Moreover, there is no analysis of the additional vehicle trips that would be created by the Project and what those impacts would be on existing traffic conditions nor existing parking. (Note: the impact of toxics on the bay from the Project will be discussed separately.) Moreover, the EIS fails to address how the Project proposes to mitigate the increased traffic impacts. Finally, the EIS asserts that the Project will reduce traffic impacts, without the citation to any evidence and/or study supporting that conclusion.</p> <p>Finally, the traffic study and parking study fails to consider the loading dock area and the fact that boats will continue to load from the dock area for snorkel trips and manta trips after the project is constructed. I had considered the traffic study to be so inadequate and below industry standards that it should not be considered a study such that a real traffic study needs to be considered with traffic impacts considered both seasonally and by all times of the day.</p>		<p>across the bayfront, creating safer and more efficient access between Kamehameha III Road and Kaleiopapa Street, thereby reducing pedestrian-vehicle conflicts in heavily trafficked areas like the boat ramp. To further enhance pedestrian safety, the project proposes the use of 'ili (stone pebble) treatments for roadway crosswalks. This textured and visually distinct material serves as a tactile and visible cue to drivers, effectively slowing traffic and clearly marking pedestrian crossing areas.</p>
<p>If it does anything at all to mitigate traffic congestion, I believe it will be offset by the additional traffic that the resort will create and all the additional parking services that will be entailed.</p>	Jessica Kuzmier	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.</p> <p>The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the Project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>I do NOT believe more housing is needed in this area... that will simply add to the congestion, pollution and disruption to this lovely area.</p>	<p>Johanne Parker</p>	<p>The proposed project does not include the development of homes but does include low-impact lodging units mauka of Old Kona Road.</p> <p>Appendix M to the FEIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions.</p>
<p>The DEIS adversely and significantly impacts congestion, traffic, and noise in this area: The construction trucks needed to implement this plan alone will add dust, traffic, and noise to otherwise quiet neighborhood. The DEIS concedes this point. Once the 150-unit resort is built, assuming at least a two-person occupancy rate per unit with one rental car per unit, congestion will be magnified. The resort will also have employees- additional persons. The DEIS states: “An increase in visitor accommodations will result in an increase in water consumption, wastewater disposal, and solid waste generation. Therefore, there will be increased demand on existing utilities and infrastructure.” (DEIS at 4.16) However, there is an inadequate discussion of how these people will impact the area, specifically, their foot traffic and their access to and use of this tiny Bay. Congestion already exists due to various users of the Bay: Outrigger Kona Resort &amp; Spa guests, the popular Ho’oulu Community Farmers Market visitors, the Canoe Club members, tourists visiting cultural sites, customers of Fair Wind Cruises, Dolphin Discoveries, and Sea Quest, kayakers, fishermen, divers, paddlers, snorkelers, swimmers, and park goers. This congestion will be amplified by those visiting and working at the proposed 150-unit resort, the restaurant, the retail center, and the cultural/educational center. The DEIS accurately states that the area is already congested: “High demand among the Keauhou Bay user groups has resulted in vehicle, pedestrian, and in-water congestion and conflicts.” (DEIS at 2.6.3) The DEIS goes on to state:</p>	<p>Tamyra Rice</p>	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.</p> <p>The Mobility Analysis Report concluded that the Project would not result in significant traffic impacts. Although the Project is estimated to generate approximately 1,928 new daily weekday vehicle trips, the construction of Old Kona Road, between Kamehameha III Road and Kaleiopapa Street, is expected to significantly improve overall access and connectivity, mitigating the potential for congestion on existing roads. This roadway improvement, along with a shared-use path for bicycles and pedestrians, will enhance multimodal connectivity, reduce reliance on current roadway alignments, and consequently decrease traffic burdens in the vicinity.</p> <p>Traffic analysis indicates that intersections in the area will continue to operate at desirable levels (LOS D or better) even with the increased traffic volumes forecasted for 2035, indicating that no substantial shifts or additional congestion would result from the Project. The report highlights specific mitigation measures, including internalizing traffic flows within the development and providing formalized off-street parking to reduce intrusion into surrounding neighborhoods.</p> <p>To mitigate construction-related traffic impacts to surrounding neighborhoods, the Project will implement a comprehensive Construction Management Plan (CMP) that includes Best Management Practices (BMPs) such as designated parking and staging areas, traffic monitoring, off-peak material deliveries, and</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>“Existing vehicle and pedestrian circulation patterns across Keauhou Bay have evolved over time to serve a variety of changing land uses within a small, constrained area. The current situation presents both functional and hazardous conflicts between pedestrians, bicyclists, and vehicles (cars, buses, delivery trucks, and boat trailers), as well as wayfinding challenges along the immediate 7 bayfront.” (DEIS at 2.6.5) Yet, the DEIS only offers to add more bodies, buildings, noise, and vehicles to the equation. The DEIS does not use current numbers to describe populations, but 2020 numbers. This leads to inaccurate conclusions. The proposal includes the rebuilding of Old Kona Road which lies behind the small beach at Keauhou Bay. How will the construction trucks that need to access Old Kona Road impact traffic on Ali’i Drive, Kaleiopapa Street, and Kamehameha III Road? How will the influx of approximately 300 resort guests impact traffic patterns on those routes? With regard to traffic counts, the DEIS states: “The County recognizes LOS D as the minimum acceptable LOS for its intersections in most urban areas, as the minimum acceptable level (County of Hawai’i Chapter 25, Article 2, Division 4, Section 46).” (DEIS at 4.11) The DEIS cites traffic counts applicable to urban areas, but the adjacent neighborhoods are not urban. Thus, the traffic analyses are faulty. Additionally, the traffic studies do not indicate in which months they were undertaken. Certain times of year have a dramatic impact on traffic.</p>		<p>maintenance of safe pedestrian, bicycle, and vehicle access. Traffic Control Plans (TCPs) will be phased and coordinated to prevent overlapping closures, with work primarily occurring between 8:30 a.m. and 3:00 p.m. Measures will also include roadway condition documentation, street usage permits, coordination with transit agencies, and ADA-compliant pedestrian accommodations. These strategies aim to minimize disruptions and ensure public safety throughout construction. Please refer to EIS Section 4.11 for a fuller discussion on proposed mitigations.</p> <p>The EIS uses 2020 population data because it is the most recent and accurate information available from the U.S. Census Bureau. The Project Area lies within the Kahalu’u-Keauhou census-designated place (CDP), and uses 2020 Census data for consistency and reliability in analyzing potential impacts. The decennial census, conducted every 10 years, is the most comprehensive and precise source. Since the Draft EIS was published in 2024, the 2020 Census remains the most authoritative dataset for population analysis.</p> <p>According to the State Land Use Designation Map (Figure 1-4), the entire Project Area and its surrounding vicinity are designated as Urban. This designation reflects an area primarily characterized by a mix of residential, apartment, condominium, retail, and resort developments. The project is in alignment with the established urban landscape and is consistent with the goals and planning objectives for urban development in this area.</p>
<p>We request an updated traffic analysis (and other related noise and air quality analyses) to include this expanded study area. Redistribution of Traffic Volume - The construction of Old Kona Road to connect Kamehameha III Road with Kaleiopapa Street will result in a major shift in traffic volume away from Kaleiopapa Street to Kamehameha III Road with associated parking, safety, noise and air quality impacts. The traffic analysis states the traffic forecasts considered such a redistribution of traffic, but this statement is not supported by the numerical analysis. Consideration of</p>	David Markley	<p>The study locations were selected based on the number of trips added to each turning movement at the intersections in the vicinity of the project site. The potential impact of traffic added to the requested intersections is expected to be less than significant during the study peak hours based on typical traffic operations. The through road connection of Old Kona Road is proposed as a low-speed, low-volume roadway with traffic calming devices (e.g., speed humps) that will provide local access and circulation to uses within the site but discourage use of the road as a cut-through facility. The project’s on-site parking supply is distributed in such a</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>redistribution of volume was limited to the project-generated volumes only but did not reflect the redistribution of existing and non-project growth in traffic volume. The effect of the proposed through-road connection on future traffic volumes will have a greater impact than the project trip generation. It is reasonable to expect that 65% to 75% of all traffic (current volumes, other non-project traffic volume increases and future traffic from the proposed development) will use Kamehameha III Road to access the proposed project. This is because most of the population density, commercial opportunities, tourist and entertainment destinations, and transportation services are north of the proposed development. This shift in background traffic will significantly erode the residential character of neighborhoods currently relying on Kamehameha III Road as primary access. We request a revised traffic study that includes a figure showing the 2035 traffic volume forecast with the proposed through road connection but without the proposed development. This would show that 2035 volumes will shift from the existing pattern to a pattern where the majority of the non-project traffic enters and leaves the Keauhou via Kamehameha III Road.</p>		<p>way that will take advantage of the two access roadways (Kamehameha III Road and Kaleiopapa Street), but substantial redistribution of existing traffic (i.e., boat trailers) is not anticipated because of the Old Kona Road design to slow traffic through the site.</p>
<p>The additional to this area is not sustainable unless roads are improved.</p>	<p>Jon Jokiel</p>	<p>Appendix M to the DEIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The traffic analysis shows that the addition of project-generated traffic would not result in any significant roadway operations impacts under typical peak hour conditions. The Project includes improvements to Old Kona Road, between Kamehameha III Road and Kaleiopapa Street, which are expected to significantly enhance overall access and connectivity, helping to mitigate potential congestion on existing roads. These roadway improvements, along with a shared-use path for bicycles and pedestrians, will enhance multimodal connectivity, reduce reliance on current roadway alignments, and consequently decrease traffic burdens in the area.</p>
<p>More parking spaces and shops will only lead to more people coming to the area, which the area cannot</p>	<p>M. Kekoa Aukai-Richardson</p>	<p>Kamehameha Schools understands your concerns about the increase in visitors and the potential strain on Keauhou Bay. The</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
sustain. For anyone curious as to what that may look like, visit Hanauma Bay. Even though it isn't developed, far too many people are allowed to visit, and locals can see the results. It's a depressing place if you love marine life and nature.		KBMP has been designed to strategically redirect growth and commercial activities away from sensitive shoreline and cultural areas to appropriate inland locations above 'Ahu'ula cliff and along Kaleiopapa Street. The Project intentionally limits the lodging's physical footprint compared to what current resort zoning would otherwise permit. Through this approach, the presence of additional lodging units aligns with the goals of environmental sustainability and cultural stewardship, while revenues generated directly support ongoing conservation efforts and responsible management of the area's resources.
My second concern relates to increased traffic. How will you mitigate the extra noise and air pollution from construction truck traffic along Ali'i Dr and Kaleiopapa St by my condo (Keauhou Akahi 78-7030 Ali'i Dr)? And also to/from your resort and commercial area once built?	Marjorie Bryant	To mitigate construction-related traffic impacts to surrounding neighborhoods, the Project will implement a comprehensive Construction Management Plan (CMP) that includes Best Management Practices (BMPs) such as designated parking and staging areas, traffic monitoring, off-peak material deliveries, and maintenance of safe pedestrian, bicycle, and vehicle access. Traffic Control Plans (TCPs) will be phased and coordinated to prevent overlapping closures, with work primarily occurring between 8:30 a.m. and 3:00 p.m. Measures will also include roadway condition documentation, street usage permits, coordination with transit agencies, and ADA-compliant pedestrian accommodations. These strategies aim to minimize disruptions and ensure public safety throughout construction. Please refer to EIS Section 4.11 for a fuller discussion on proposed traffic mitigations.
This small bay does not need a new 105 room resort, there is already too many people and traffic. Bringing even more people to this small area will add to too big of a burden on the land and bay.	Barbara Garcia	Kamehameha Schools understands your concerns about the increase in visitors and the potential strain on Keauhou Bay. The KBMP has been designed to strategically redirect growth and commercial activities away from sensitive shoreline and cultural areas to appropriate inland locations above 'Ahu'ula cliff and along Kaleiopapa Street. The Project intentionally limits the lodging's physical footprint compared to what current resort zoning would otherwise permit. Through this approach, the presence of additional lodging units aligns with the goals of environmental sustainability and cultural stewardship, while revenues generated

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		directly support ongoing conservation efforts and responsible management of the area's resources.
There will be more traffic, resort housing that does not help alleviate the affordable housing crisis on the island, excess commercial space, and permanent negative impacts on the land and sea. Once lost this is unlikely to be regained.	Laurel Terry	<p>Kamehameha Schools understands your concerns about the increase in visitors and the potential strain on Keauhou Bay. The KBMP has been designed to strategically redirect growth and commercial activities away from sensitive shoreline and cultural areas to appropriate inland locations above 'Ahu'ula cliff and along Kaleiopapa Street. The Project intentionally limits the lodging's physical footprint compared to what current resort zoning would otherwise permit. Through this approach, the presence of additional lodging units aligns with the goals of environmental sustainability and cultural stewardship, while revenues generated directly support ongoing conservation efforts and responsible management of the area's resources.</p> <p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the Project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.</p>
A brief review of opponent postings in the Keauhou Bay area states that the project will result in 900 additional people daily in the immediate area and more than 150 homes. We were disappointed to find no direct discussion or defense about these allegations in the document. We certainly also challenge the lack of common sense and logic by the consultants, Fehr & Peers, who assert in this report that "The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr & Peers to identify and assess existing and future mobility options as well as potential traffic impacts generated by the Project (Appendix E). The MAR found that the implementation of the Project would not result in significant	Bill and Cindy Armer	<p>Kamehameha Schools would like to clarify that the low-impact lodging project is not permanent residential housing. The KBMP proposes low-impact lodging that reflects Kamehameha Schools' commitment to natural and cultural resource stewardship and sustainable tourism. The project is intentionally designed to limit its physical footprint and minimize disturbance to the land.</p> <p>The Mobility Analysis Report (MAR) prepared by Fehr &amp; Peers has assessed these potential traffic impacts in detail, considering future conditions and current traffic patterns. The analysis determined that the project will not result in significant traffic impacts, as the proposed improvements to the road network and multimodal transportation options will help manage increased demand. The traffic analysis is based on the projected increase in visitor numbers, and the consultants have recommended several</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>traffic impacts." The issues of population density, emergency vehicles and daily traffic congestion demand a more complete and responsible conclusion. This is an area served by two lane road access and is frequently stopped for extensive waiting periods now--due to the explosion of residents, vehicles, and the impacts on the environment and the Bay. We have been through multiple evacuations of the tsunami corridor in Keauhou.</p>		<p>mitigation measures, such as pedestrian-oriented infrastructure to reduce the dependency on vehicular traffic by encouraging walking, roadway improvements to enhance traffic flow along Old Kona Road and increased parking options to alleviate congestion in the immediate bayfront area.</p> <p>Kamehameha Schools acknowledges the limitations of the existing two-lane road access and recognizes the need to plan for emergency situations. During construction, KS will work with local authorities to facilitate traffic management plans to allow for unimpeded emergency vehicle access to and from the area.</p>
<p>We commented on the inadequacy of the scoping document in April 20, 2022. While some of the comments in that letter have been superficially addressed, there remain areas where transportation related impacts have not been adequately or accurately analyzed. Accordingly, the probability of significant adverse impacts due to the proposed development still exists unless there is significant reduction in the scale and character of the proposed action and/or significant increase in tangible mitigation that significantly reduces the impacts of the proposed development.</p>	David Markley	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the Project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.</p>
<p>This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a serious negative impact in Keauhou Bay.</p>	Donna Dufault	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the Project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.</p>
<p>There are deficiencies in the Draft EIS which prevent the community and government from truly and reasonably understanding the impacts they are being asked to approve. Why are there no substantial studies of current traffic compared to what the additional traffic will be under the proposal? With increases in congestion around the bay,</p>	Aaron Chang	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the Project layout</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>polluted runoff is unavoidable, which will harm marine life. The community deserves a better study on how vehicle and foot traffic will be moving through this area together, and how many more people and vehicles are likely to impact the area over many years.</p>		<p>is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.</p>
<p>Traffic Analysis fails to account for tsunami and emergency evacuations. Keauhou Bay is frequented by a wide array of users (e.g., fishers, divers, swimmers, boat operators, paddlers) including 'ohana with keiki and elderly. The entirety of the proposed project sits within a tsunami evacuation zone. With existing traffic the roads are already congested. Yet, the Traffic Analysis fails analysis shows little impact and too fails to assess how additional vehicles and populations will impact traffic during emergency evacuations. Public safety and evacuations during an emergency situation should be prioritized and assessed to provide realistic projections of traffic and added population impacts. This is mandatory, not optional. How you going bring all this added traffic and users then not assess emergency evacuation scenario? What happens when people die cause they cannot get out with gridlocked systems? Why not prevent this kine catastrophe? The DEIS should provide this analysis to ensure that public safety is considered and current and proposed roads can indeed ensure safe evacuations. I have the following questions: How will added vehicular and pedestrian traffic impact emergency evacuations? What is the traffic assessment for emergency evacuation scenarios?</p>	<p>Loke Aloua</p>	<p>The KBMP is designed to mitigate tsunami threats by improving connectivity and emergency access through infrastructure enhancements. The construction of Old Kona Road, linking Kamehameha III Road and Kaleiopapa Street, provides a crucial alternative evacuation route, significantly enhancing emergency responsiveness and accessibility during tsunami events. In the event of a tsunami or other natural disaster, the Project is designed to avoid creating barriers to emergency access or hindering evacuation routes. The design of the project will prioritize unimpeded access for emergency vehicles including ambulances, fire trucks, and police vehicles to critical areas.</p> <p>For further details please refer to the EIS Section 4.7.5, which includes a discussion on tsunami mitigation plans.</p>
<p>Regarding traffic (and evacuation safety), Ali'i Drive is already completely impassable at several times during the day. How can the area support another such influx of population?</p> <p>The historical value of this law should be enough to help make Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads.</p>	<p>Michael Hanly</p>	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the Project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS? A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development. The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges. The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic. This NEWS article by Hawai'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year. The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems. With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state. This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14. Seven of which happened in the last two weeks. Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes. "We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added. The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments. 14 Please read</p>	<p>Michael Hanly Jennifer Ball</p>	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The traffic analysis shows that the addition of project-generated traffic would not result in any significant roadway operations impacts under typical peak hour conditions.</p> <p>According to data from the Hawaii Department of Transportation (2025), while the number of island wide traffic fatalities through April 1, 2025 (10) is lower compared to the same period in 2024 (14), the number of annual fatalities has varied between 15 and 33 between 2018 and 2024 with no consistent trend up or down.</p> <p>Increased traffic volume does not necessarily correlate to an increase in traffic fatalities because many factors contribute to vehicle crashes. Per Hawai'i Department of Transportation, Highways Program Status data, five fatal crashes occurred within a two-mile radius of the Project Area between 2013 and 2025, with two on Ali'i Drive to the north and the remainder on Kuakini Highway to the east. Of these five fatal crashes, all involved drugs or alcohol as a primary contributing factor.</p> <p>The Project includes various traffic mitigation strategies and design features intended to reduce congestion, enhance safety, and support the area's existing infrastructure.</p> <p>The KBMP is also designed to mitigate tsunami threats by improving connectivity and emergency access through infrastructure enhancements. The construction of Old Kona Road, linking Kamehameha III Road and Kaleiopapa Street, provides a crucial alternative evacuation route, significantly enhancing emergency responsiveness and accessibility during tsunami events. In the event of a tsunami or other natural disaster, the Project is designed to avoid creating barriers to emergency access or hindering evacuation routes. The design of the project will prioritize unimpeded access for emergency vehicles including ambulances, fire trucks, and police vehicles to critical areas.</p> <p>For further details please refer to the EIS Section 4.7.5, which includes a discussion on tsunami mitigation plans.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." All of these roads only have two lanes! There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested. These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly. In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well. Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.. It seems that not a day goes by without the news reporting on a traffic crash on Hawai'i Island... Here are some other statistics that are even more staggering: -28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees -13% of pedestrians hit at 20 mph actually suffer fatality -73% of pedestrians hit at 40 mph suffer fatality -</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road! -56% of fatal crashes were the result of alcohol or drugs -41% of fatal crashes occurred in light trucks and vans -49% of crashes occur during the day, outside of peak traffic hours -Of all the crash fatalities, most were males between 20 to 24-years old. "That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"</p>		
<p>There was a crash on Alii Dr. and when there is an accident on this road, it turns into only one lane that needs a flagger to help direction traffic. and that adds even more traffic to this already seriously congestion road, and Kamehameha Schools wants to add a resort on this road, and that will increase the traffic even more. Here is the Island News video on the crash on Alii Dr. <a href="https://www.youtube.com/watch?v=FQSnPDji8">https://www.youtube.com/watch?v=FQSnPDji8</a> Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island. Please read this Path article, HAWAI'I COUNTY'S VISION ZERO INITIATIVE A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawai'i Island. "That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?" This was taken from Path as well as The Law of the Splintered Paddle below <a href="https://pathhawaii.org/hawaii-countys-vision-zero-initiative">https://pathhawaii.org/hawaii-countys-vision-zero-initiative</a></p>	<p>Donna Cherrier</p>	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The traffic analysis shows that the addition of project-generated traffic would not result in any significant roadway operations impacts under typical peak hour conditions.</p> <p>According to data from the Hawaii Department of Transportation (2025), while the number of island wide traffic fatalities through April 1, 2025 (10) is lower compared to the same period in 2024 (14), the number of annual fatalities has varied between 15 and 33 between 2018 and 2024 with no consistent trend up or down.</p> <p>Increased traffic volume does not necessarily correlate to an increase in traffic fatalities because many factors contribute to vehicle crashes. Per Hawai'i Department of Transportation, Highways Program Status data, five fatal crashes occurred within a two-mile radius of the Project Area between 2013 and 2025, with two on Ali'i Drive to the north and the remainder on Kuakini Highway to the east. Of these five fatal crashes, all involved drugs or alcohol as a primary contributing factor.</p> <p>The Project includes various traffic mitigation strategies and design features intended to reduce congestion, enhance safety, and support the area's existing infrastructure.</p>
<p>Traffic Safety If opened, the Old Kona Road would pass right next to the proposed picnic and grill areas. Children will likely be running around and playing in the area. Vehicle</p>	<p>Michael Herbert</p>	<p>The through road connection of Old Kona Road is proposed as a low-speed, low-volume roadway with traffic calming devices (e.g., speed humps) that will provide local access and circulation to uses</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>traffic to the proposed resort including visitors, employees, and delivery trucks would be passing by the picnic areas constantly. This is unsafe. The current plan does not properly balance residents' safety and enjoyment of the proposed added picnic areas with visitors' resort access. Access to the resort should only be allowed via Kalieopapa Street, where all other Keauhou Bay commercial and resort activity is currently concentrated.</p>		<p>within the site but discourage use of the road as a cut-through facility. The project's on-site parking supply is distributed in such a way that will take advantage of the two access roadways (Kamehameha III Road and Kaleiopapa Street), but substantial redistribution of existing traffic (i.e., boat trailers) is not anticipated because of the Old Kona Road design to slow traffic through the site.</p>
<p>The "Existing Conditions" paragraph on page 4-117 states: "The Project Area is in (a) congested area with a high volume of pedestrian and vehicular traffic. This has resulted in functional hazardous conflicts between pedestrians, bicyclists, and vehicles (cars, buses, delivery trucks, and boat trailers." This sounds like a demolition derby, yet there is no documentation of existing traffic safety conditions in the traffic analysis, sources of the safety issues, forecast of continuation of the unsafe trend, and/or how such impacts would be mitigated with the proposed development.</p> <p>One specific example is the conflict between motor vehicle traffic and pedestrians along Kalieopapa Street. It is noted that there is substantial parking along the lower portion of this road where no sidewalks exist. Yet Figure 4-42 – Proposed Circulation, shows this road as a "Vehicles Only" road. The pedestrian paths are nice, but pedestrians who park along Kalieopapa Street will follow the path of least resistance and will walk along the road as they make their way to and from Keauhou Bay. There needs to be a sidewalk at least on one side of the road so pedestrians are not forced to walk in the street. We request documentation of safety impacts in the study area forecast of future conditions with the new through road connection and proposed development, and effective mitigation including sidewalks on both sides of these roads, bike lanes, and traffic calming/speed reduction measures to reduce the frequency and severity of this problem.</p>	<p>David Markley</p>	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The report includes forecasted traffic conditions with the implementation of the Project. The traffic analysis shows that the addition of project-generated traffic would not result in any significant roadway operations impacts under typical peak hour conditions.</p> <p>As part of the planning process for the KBMP, Kamehameha Schools engaged with a wide range of stakeholders and has incorporated community concerns, including firsthand observations about pedestrian safety, traffic congestion, and the impact of incompatible activities at the bayfront.</p> <p>Stakeholders highlighted several pressing issues, notably the absence of sidewalks along Kaleiopapa Street, which forces pedestrians to walk on the roadway alongside vehicle and boat trailer traffic. The limited turnaround space at the end of Kaleiopapa Street further exacerbates congestion. It has also been cited that when cultural ceremonies occur, such as those at the Kauikeaouli birthsite, participants often occupy the roadway, leading to conflicts with vehicular traffic, noise, and a diminished experience for those involved in spiritual or ceremonial observances.</p> <p>The KBMP is designed to address these challenges through its comprehensive management strategies. These include the proposed development of pedestrian-oriented infrastructure and improved circulation patterns to enhance safety and efficiency. Importantly, the plan proposes reactivating the historic Old Kona</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>Road as a throughway to better manage traffic flow and redirect it away from sensitive cultural areas.</p> <p>A significant component of the project also includes increasing parking capacity at the existing northern parking lot as well as providing more parking spaces than required at the new commercial center. This will relieve pressure on informal roadside parking. Pedestrian pathways will offer direct, safe access from the parking area to community spaces along the bayfront. Clear signage, well-marked crosswalks, and other visual cues will further support intuitive wayfinding and discourage walking along the roadway.</p> <p>It's important to note that Kaleiopapa Street is owned by the County, not Kamehameha Schools. As such, any pedestrian safety improvements, such as the installation of a new sidewalk, would need to be initiated and carried out by the County. Kamehameha Schools can only regulate and manage aspects within the boundaries of the Project Area itself.</p> <p>Please refer to EIS Section 3.2.5 for more information on parking and pedestrian circulation.</p>
<p>Also, our driveway is just past a blind corner on Ali'i Dr where the speed limit of 35 mph is regularly ignored by drivers, most of whom speed by at 45+ mph. How will you mitigate the increased danger turning left (or right) out of my condo onto Ali'i Dr as a consequence of your increased traffic? Also, how will you ensure pedestrian safety in this area with your increased traffic? It's a popular walking, running and biking route. I use it regularly. I suggest lowering the speed limit to 25 mph on Ali'i in our area and installing speed bumps on Ali'i in our area to mitigate both these factors. But drivers regularly drive around the speed bumps on Kaleiopapa St, so this won't be enough. For the latter reason, I also suggest an actual physical barrier - like a low white curb or posts along the white line that denotes the shoulder - be installed on both Ali'i Dr in our area and Kaleiopapa St to protect pedestrians. I wouldn't want your</p>	<p>Marjorie Bryant</p>	<p>The Project includes various traffic mitigation strategies and design features intended to reduce congestion, enhance safety, and support the area's existing infrastructure. These include the proposed development of pedestrian-oriented infrastructure and improved circulation patterns to enhance safety and efficiency. Importantly, the plan proposes reactivating the historic Old Kona Road as a throughway to better manage traffic flow and redirect it away from sensitive cultural areas.</p> <p>A significant component of the project also includes increasing parking capacity at the existing northern parking lot as well as providing more parking spaces than required at the new commercial center. This will relieve pressure on informal roadside parking. Pedestrian pathways will offer direct, safe access from the parking area to community spaces along the bayfront. Clear signage, well-marked crosswalks, and other visual cues will further</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
organization to be exposed to a lawsuit should anyone get hurt or die in this area		<p>support intuitive wayfinding and discourage walking along the roadway.</p> <p>It is important to note that Ali'i Drive is owned by the County, not Kamehameha Schools. As such, any pedestrian safety improvements, such as the installation of speed bumps or lowering the speed limit, would need to be initiated and carried out by the County. Kamehameha Schools can only regulate and manage aspects within the boundaries of the Project Area itself.</p> <p>Please refer to EIS Section 3.2.5 for more information on parking and pedestrian circulation.</p>
<p>4. The public access parking area on your land on Ehukai St is embarrassing. Can you please pave it, mark the spaces, pick up the trash, and start maintaining it? There was a derelict van with long expired tags parked there for 4 weeks until last week. I waited for the Outrigger to do something about it. They didn't. When I finally called the police, they told me mine was the first report about this vehicle. That is absurd. This is on your land that the Outrigger leases. The Outrigger staff seems to think the public access areas are someone else's responsibility. It is your land!</p> <p>6. Please consider ending Kaleiopapa St at the County boat ramp and not continuing it as it is now past Fair Winds Snorkel Cruises. There are only eight parking spaces there now at the end so it would have a negligible impact on parking. It would open up the area more to recreation, improve pedestrian safety, and allow for more green space around the significant cultural monuments and the cave</p>	Peter McCormick	<p>Parking areas along Ehukai Street are outside of the KBMP Project Area. Enforcement and maintenance issues in the public right-of-way are the responsibility of the County. However, the project does propose improvements for a new parking area along Kamehameha III Road.</p> <p>An existing parking lot north of the bay along Kamehameha III Road is unimproved and without marked stalls or lighting. Planned improvements include paving the existing gravel lot, providing marked stalls and lighting. Please refer to EIS Section 3.2.5 for a discussion on parking and pedestrian circulation.</p> <p>It's important to note that Kaleiopapa Street is owned by the County, not Kamehameha Schools. Therefore, Kamehameha Schools has no jurisdiction in ending the road at the county boat ramp. Kamehameha Schools can only regulate and manage aspects within the boundaries of the Project Area itself.</p>
1. Most of Ehukai St is already designated by the County and marked as no parking but this is rarely enforced, even when the police are called. Illegal parking creates a safety hazard for pedestrians along this street. In cooperation with the County, please consider adding sidewalks with curbs along both sides of Ehukai St and eliminate all parking along the street.	Peter McCormick	<p>A significant component of the Project includes increasing parking capacity to relieve pressure on informal roadside parking. Pedestrian pathways will offer direct, safe access from the parking area to community spaces along the bayfront. Clear signage, well-marked crosswalks, and other visual cues will further support intuitive wayfinding and discourage walking along the roadway.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>It's important to note that Ehukai Street is owned by the County, not Kamehameha Schools. As such, any pedestrian safety improvements, such as the installation of a new sidewalk, would need to be initiated and carried out by the County. Kamehameha Schools can only regulate and manage aspects within the boundaries of the Project Area itself.</p> <p>Consultation and discussions with the County will occur during County land use approvals and during design review and approval of construction plans. The detailed design requirements and any required improvements along Ehukai will be developed at that time in coordination with the County.</p>
<p>9. The proposed boat traffic will also undermine bay water quality, and further impede use by all who enjoy non-motor boat use, recreation, and fishing in Keauhou Bay.</p>	<p>Peter Matlock</p>	<p>The existing vehicular and boat parking capacity at Keauhou Bay is limited, leading to overcrowding, informal parking practices, and circulation challenges. This shortage of organized parking space contributes to user conflicts and diminishes overall safety and accessibility. To address these issues, the KBMP includes improvements such as expanding and formalizing existing boat trailer and parking areas along Kamehameha III Road. Additionally, a new boat trailer parking area is proposed on the south end of the bay.</p> <p>This addition aims to alleviate the existing parking deficiency and better serve the boaters who already use the bay. It is not expected that the availability of these new stalls will significantly increase the number of boaters using the dock, as the improvement is intended primarily to meet current needs rather than expand capacity.</p>
<p>Cumulative Impacts page 4-176. The potential for increased conflict between motorized and non-motorized use is a cumulative impact that the DEIS should more fully consider before increasing the parking areas for VME.</p>	<p>Joanne (Jody) Wheeler                      Carolyn Leilani Carter</p>	<p>The Keauhou Bayfront currently experiences pedestrian and vehicle safety issues due to poor circulation patterns, inadequate pedestrian infrastructure, and a mix of incompatible uses in close proximity. These conditions have led to documented user conflicts, including congestion, unsafe crossings, and limited accessibility for both vehicles and pedestrians. The KBMP directly addresses these challenges through comprehensive management strategies designed to reorient traffic flow, improve designated pedestrian</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>pathways, and separate conflicting uses. As a result, project implementation is anticipated to have substantial beneficial impacts on overall traffic conditions and pedestrian safety throughout the bayfront area.</p> <p>The KBMP proposes the development of pedestrian-oriented infrastructure and improved circulation patterns to enhance safety and efficiency. Importantly, the plan proposes reactivating the historic Old Kona Road as a throughway to better manage traffic flow and redirect it away from sensitive cultural areas.</p> <p>A significant component of the project also includes increasing parking capacity at the existing northern parking lot as well as providing more parking spaces than required at the new commercial center. This will relieve pressure on informal roadside parking. Pedestrian pathways will offer direct, safe access from the parking area to community spaces along the bayfront. Clear signage, well-marked crosswalks, and other visual cues will further support intuitive wayfinding and discourage walking along the roadway.</p> <p>Please refer to EIS Section 3.2.5 for more information on parking and pedestrian circulation.</p>
The plan will necessitate additional parking – I know from my experiences at home that covering land with parking creates issues for the ‘āina.	Laurel Terry	All new parking lots proposed under the KBMP will be developed in accordance with applicable State and County standards to ensure safety, functionality, and environmental compliance. These lots will incorporate drainage infrastructure designed to retain and treat stormwater on site, helping to manage runoff and minimize the potential for pollution entering nearby marine and coastal environments. Through the integration of best management practices, environmental impacts from the development of these parking areas are not anticipated.
3. Will public vehicular and parking access to He’eia Bay be provided through this project area?	Claudia Rohr	He’eia Bay is not located within the Project Area. As such, no improvements for public vehicular and parking access for He’eia Bay are proposed.

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Lastly, please clarify the issue of the potential new boat trailer parking illustrated in Figure 1-10 of the document. This is the only graphic that lists this as a “potential” use. All other figures - Figure 3-34, 3-35, and 3-47 - show this as a feature that would be established, and not a “potential” use.</p>	<p>Elizabeth Dunn</p>	<p>The boat trailer parking proposed for the south end of the bay is noted as "potential" because its development is contingent upon future market conditions and lease negotiations. While the site has been identified as a suitable location to alleviate congestion and better organize trailer storage, its implementation depends on evolving operational needs and the successful establishment of agreements with future tenants or users.</p>
<p>Our observation is that Keauhou Bay is currently utilized almost to capacity in the following areas: - Automobile parking - Boat storage (some of which is long-term and need not be adjacent to the water) - Permanent moorings in the Bay - Launch ramp capacity and trailer parking - Commercial boat operations to provide visitor trips to Kealakekua Bay and Manta Ray experience (these involve up to 200 or more people a day)</p>	<p>Tom Fetter</p>	<p>The existing vehicular and boat parking capacity at Keauhou Bay is limited, leading to overcrowding, informal parking practices, and circulation challenges. This shortage of organized parking space contributes to user conflicts and diminishes overall safety and accessibility. To address these issues, the KBMP includes improvements such as expanding and formalizing existing boat trailer and parking areas along Kamehameha III Road. These upgrades will include paving, stall delineation, and lighting, designed to improve both capacity and safety. Additionally, a new boat trailer parking area is proposed on the south end of the bay. Please refer to EIS Section 3.2.5 for more information on parking and pedestrian circulation.</p>
Influx of Visitors During IRONMAN		
<p>Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN? "On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." Where are the EIS reports on human density? There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it.</p>	<p>Donald                      Robert Berger                      Stephen                      Goudreau                      Sara Irwin                      Goudreau                      Lucia Kaplan                      Rebecca                      Melendez                      Sherina Ong</p>	<p>Kamehameha Schools acknowledges that the Ironman Triathlon is an event that brings visitors to Hawai'i Island. The additional lodges created by the KBMP could assist in accommodating the influx of visitors during these peak travel periods.</p> <p>The route of the Ironman Triathlon does not pass through Keauhou Bay, and as such, direct race-related closures will not affect the area. While some traffic may be diverted from surrounding roads during the event, it is not anticipated to significantly impact circulation or access within Keauhou Bay.</p> <p>An increase in visitor numbers does not inherently lead to environmental degradation; rather, it is the effectiveness of space management that determines environmental outcomes. The KBMP proposes a comprehensive, long-term management strategy to better organize activities and uses throughout the bay. By</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
	Roslyn Patrick-Sunnes Deborah Sevy Mayari Sherina Ong Lisa Thatcher David Hill Kaleihua Kamaka Kellie Kilcuo William Lim Jenni Lund Alicia Morrier Belinda Pate Jo Quinn Jason Rigmaiden Bryn Stites Wim Verkaok Jyn Watson Celia Murry Tom Carey Riley Reynolds Sharron Rudolph Curt and Ellen Winningham	improving infrastructure, guiding visitor behavior, and protecting sensitive cultural and natural resources, the KBMP will help reduce impacts on the environment and promote sustainable use of the area. As a result, the project is expected to have beneficial long-term effects on environmental stewardship and resource conservation.

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<b>Congestion in the Bay</b>		
<p>Congestion and Use Conflict The DEIS argues that Keauhou Bay (Bay) suffers from “congestion” and conflicts with incompatible uses, however there is no study analyzing congestion (i.e., number of users over a given time span such as daily, weekly, monthly, etc. basis). Additionally, the DEIS does not evaluate how the Project, implementation of the Keauhou Bay Management Plan on approximately 29 acres of Keauhou Bay, would reduce the existing number of users or implied incompatible uses, other than reducing access to publicly owned space. Without the required analysis, the claim that the Project would reduce congestion and/or use conflicts is unsupported. In actuality, it may be reasonable to conclude that the Project would increase congestion and use conflicts at Keauhou Bay with the proposed construction of 43 homes, cultural center, commercial center, and commercial kiosks. The DEIS identifies the launch ramp stretch as an area of greatest congestion, however it proposes to add a substantial number of visitors and vehicles to that area, thereby increasing congestion further. The DEIS fails to provide any explanation as to how adding thousands of people and vehicles to areas identified as having the greatest congestion will be reduced by the Project. There is also no analysis in the DEIS of the impact on local plants or wildlife from the likely increased usage of the Bay because of the Project. Lastly, there is no analysis of future impacts on the existing uses of the Bay with the addition of rental kayaks and stand-up paddle boards to the Bay. The reasons listed above demonstrate that the DEIS has failed to provide the required analyses and supporting evidence.</p>	<p>Jennie Shield</p>	<p>An increase in visitor numbers does not inherently lead to environmental degradation; rather, it is the effectiveness of space management that determines environmental outcomes. The KBMP proposes a comprehensive, long-term management strategy to better organize activities and uses throughout the bay. By improving infrastructure, guiding visitor behavior, and protecting sensitive cultural and natural resources, the KBMP will help reduce impacts on the environment and promote sustainable use of the area. As a result, the project is expected to have beneficial long-term effects on environmental stewardship and resource conservation.</p> <p>As part of the planning process for the KBMP, Kamehameha Schools engaged with a wide range of stakeholders and has incorporated community concerns, including firsthand observations about pedestrian safety, traffic congestion, and the impact of incompatible activities at the bayfront.</p> <p>Stakeholders highlighted several pressing issues, notably the absence of sidewalks along Kaleiopapa Street, which forces pedestrians to walk on the roadway alongside vehicle and boat trailer traffic. The limited turnaround space at the end of Kaleiopapa Street further exacerbates congestion. It has also been cited that when cultural ceremonies occur, such as those at the Kauikeaouli birthsite, participants often occupy the roadway, leading to conflicts with vehicular traffic, noise, and a diminished experience for those involved in spiritual or ceremonial observances.</p> <p>The KBMP is designed to address these challenges through its comprehensive management strategies. These include the proposed development of pedestrian-oriented infrastructure and improved circulation patterns to enhance safety and efficiency. Importantly, the plan proposes reactivating the historic Old Kona Road as a throughway to better manage traffic flow and redirect it away from sensitive cultural areas.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>A significant component of the project also includes increasing parking capacity at the existing northern parking lot as well as providing more parking spaces than required at the new commercial center. This will relieve pressure on informal roadside parking. Pedestrian pathways will offer direct, safe access from the parking area to community spaces along the bayfront. Clear signage, well-marked crosswalks, and other visual cues will further support intuitive wayfinding and discourage walking along the roadway.</p> <p>Furthermore, the project will maintain public beach access and support the continuation of traditional cultural practices, such as outrigger canoe use and fishing, without disruption.</p> <p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The traffic analysis shows that the addition of project-generated traffic would not result in any significant roadway operations impacts under typical peak hour conditions.</p>
<p>The DEIS concludes that: “The Project will not significantly impact the availability of recreation opportunities in the Kona District”. This may be true except for the potential of increased motorized small boat and other motorized marine recreation equipment, such as ski-dos and motorized paddle or sail boards on the waters of the bay. Unlike the larger vessels moored in the bay, these Vessels Moored Elsewhere (VME) are often operated by less experienced individuals and can move at high speeds. Both of which pose hazards to those operating without motors in the bay. These include not only outrigger canoe paddlers, but swimmers, snorkelers, scuba divers, fisherman, Honu, Nai ‘a and Hahalua. I have been out on my OC1 and with paddlers from KCC and been surprised by fast moving motorized vessels, some of whom do not observe the “No Wake” zone in the bay. I realize that the DEIS focuses on the KBMP which is primarily a plan to develop, manage and maintain KS uplands in the vicinity of Keauhou Bay, not the waters of the bay itself. Yet some of</p>	<p>Joanne (Jody) Wheeler                      Carolyn Leilani Carter</p>	<p>There is currently a shortage of boat trailer parking in the Keauhou Bay area, with demand exceeding the available supply. To address this issue, improvements to the existing boat trailer parking area has been proposed to accommodate 34 boat trailers (an increase by 15). This addition aims to alleviate the existing parking deficiency and better serve the boaters who already use the bay. It is not expected that the availability of these new stalls will significantly increase the number of boaters using the dock, as the improvement is intended primarily to meet current needs rather than expand capacity.</p> <p>The improved lot is expected to continue to be used for storage and long-term vessel parking, not day use.</p> <p>It is important to note that the authority and responsibility for enforcing boating safety and ocean regulations does not fall under Kamehameha Schools jurisdiction. In Hawai‘i, these responsibilities are managed by the Department of Land and Natural Resources (DLNR), through its Division of Boating and</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>what is done on the uplands surrounding the bay can affect those who use the waters of the bay. The potential infrastructure issues discussed below are among those. So are the adverse effects of adding 15 more onshore parking spaces to accommodate trailers for VME's. (DEIS 3.2.5 at page 3-78, Table 3.2 at page 3-79 and Fig. 3-64 at page 3-8). Before allowing more parking for VME trailers, the DEIS must examine the potential safety issues arising out of allowing more motorized VME's unlimited access to Keauhou Bay.</p>		<p>Ocean Recreation and Division of Conservation and Resources Enforcement. Kamehameha Schools is committed to further collaboration with DLNR to explore future solutions.</p>
<p>Tourists will inevitably want to swim in the bay, which will create dangerous conflicts with boats that use the small bay year-round.</p>	<p>Aaron Chang</p>	<p>The KBMP is intended to enhance shoreline access to Keauhou Bay, providing visitors with improved entry to public recreational areas and the ocean. While Kamehameha Schools does not have jurisdiction over the enforcement of ocean safety regulations, it may contribute to ocean safety and minimizing conflicts between boaters and swimmers through educational initiatives and strategically placed signage.</p>
<p>They claim that their 150 new bungalows, a high-end restaurant, and shops will lead to more native Hawaiian children enjoying the beach. This claim is false and outrageous. The narrow Bay and tiny beach can't comfortably hold more than 50 people. The nearby Outrigger Kona Resort &amp; Spa, with its 508 rooms, doesn't have a beach, and if Keauhou makes the beach "nicer," the guests there will want to enjoy it, too. Who do we think will wind up enjoying the tiny beach?</p>	<p>Ben Rice</p>	<p>In 2010, Kamehameha Schools initiated consultation with lineal descendants of Keauhou and Kahalu'u, which consultation continues today. During an early consultation meeting in the Fall of 2016, 'ohana of Keauhou and Kahalu'u shared concerns about long-standing issues in the area. They cited congestion, limited access, and the impact of inappropriate commercial and recreational activities that have eroded the bay's historical and cultural identity. Please refer to Chapter 7 of the FEIS, detailing the level of consultation conducted with lineal descendants as well as other stakeholder groups.</p> <p>Input from lineal descendants and the community guided the formation of the KBMP and identification of the plan's management strategies. Multiple listening sessions and project updates, including presentations of concepts, were provided throughout the planning process. Kamehameha Schools continues to be open to meeting with other lineal descendants that decide to come forward.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>The KBMP has been designed to address the concerns raised by reorienting the focus of the bay toward its cultural legacy and ensuring sustainable management of the land. Strategies include restoring cultural sites, historic landscape restoration, enhancing facilities, improving access, and creating heritage corridors that connect people to place through education and cultural storytelling. The KBMP also expands public shoreline areas by removing the informal volleyball court and clearly defining the extents of canoe use areas.</p> <p>Though the KBMP may result in a nominal increase in daily users at the bayfront, the plan is designed to support sustainable use and to protect the bay's sensitive environmental and cultural resources. By re-centering Keauhou as a wahi pana (sacred place) and a hub for cultural education and community connection, the KBMP aims to bring families back to a place that once played a vital role in Hawaiian history.</p>
<p>Another concern I have is congestion in Keauhou Bay. There are times when launching and landing personal watercraft is difficult due to the volume of others using the Bay. Maneuvering through swimmers, families enjoying the water, and other personal watercraft can be difficult at times. I feel the addition of a resort will only exacerbate the congestion in Keauhou Bay and escalate safety issues.</p>	Linda Churches	<p>The existing conditions at Keauhou Bay are marked by significant congestion as noted by community stakeholders. Conflicts between pedestrians, vehicles, and commercial activities create safety concerns and diminish the overall experience. The KBMP is specifically designed to address these issues by reorganizing land uses and implementing a more intentional management approach. By relocating commercial operations away from sensitive cultural areas, redesigning circulation routes, and establishing designated zones for recreational and community activities, the plan is designed to reduce user conflicts and enhance overall circulation throughout the bayfront. These strategies aim to alleviate congestion while preserving the bay's cultural integrity and improving accessibility for all.</p> <p>The low-impact lodging has been intentionally sited mauka of Old Kona Road, above 'Ahu'ula Cliff. This location provides a physical and visual setback from the bayfront, avoiding direct shoreline development.</p> <p>While Kamehameha Schools does not have jurisdiction over the enforcement of ocean safety regulations, it may contribute to</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		ocean safety and minimizing conflicts between boaters and swimmers through educational initiatives and strategically placed signage. Kamehameha Schools is committed to further collaboration with DLNR to explore future solutions.
<b>Evacuation Challenges</b>		
The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well. See the photo below that proves this point in Kona, and here is the NEWS article by KITV NEWS that talks about Hilo and the same thing is happening in Kona on the roads Kamehameha Schools wants to develop their resort, "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution."	Donna Cherrier	Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The traffic analysis shows that the addition of project-generated traffic would not result in any significant roadway operations impacts under typical peak hour conditions, when traffic volumes are highest.  The KBMP is designed to mitigate tsunami threats by improving connectivity and emergency access through infrastructure enhancements. The construction of Old Kona Road, linking Kamehameha III Road and Kaleiopapa Street, provides a crucial alternative evacuation route, significantly enhancing emergency responsiveness and accessibility during tsunami events. In the event of a tsunami or other natural disaster, the Project is designed to avoid creating barriers to emergency access or hindering evacuation routes. The design of the project will prioritize unimpeded access for emergency vehicles including ambulances, fire trucks, and police vehicles to critical areas.
The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well. See the photo below that proves this point in Kona, There was a crash on Alii Dr. and when there is an accident on this road, it turns into only one lane that needs a flagger to help direction traffic. and that adds even more traffic to this already seriously congestion road, and Kamehameha Schools wants to add a resort on this road, and that will increase the traffic even more.	Sarah Dahm Melanie Diehl Claudia Kane Rebecca Melendez Heather Tribolet	Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The traffic analysis shows that the addition of project-generated traffic would not result in any significant roadway operations impacts under typical peak hour conditions, when traffic volumes are highest.  The KBMP is designed to mitigate tsunami threats by improving connectivity and emergency access through infrastructure enhancements. The construction of Old Kona Road, linking Kamehameha III Road and Kaleiopapa Street, provides a crucial alternative evacuation route, significantly enhancing emergency responsiveness and accessibility during tsunami events. In the

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>event of a tsunami or other natural disaster, the Project is designed to avoid creating barriers to emergency access or hindering evacuation routes. The design of the project will prioritize unimpeded access for emergency vehicles including ambulances, fire trucks, and police vehicles to critical areas.</p>
<p>The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well.</p>	<p>Rebecca Meledez                      Sarah Dahm                      Melanie Diehl                      Claudia Kane                      Heather Tribolet                      Donna Cherrier</p>	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The traffic analysis shows that the addition of project-generated traffic would not result in any significant roadway operations impacts under typical peak hour conditions, when traffic volumes are highest.</p> <p>The KBMP is designed to mitigate tsunami threats by improving connectivity and emergency access through infrastructure enhancements. The construction of Old Kona Road, linking Kamehameha III Road and Kaleiopapa Street, provides a crucial alternative evacuation route, significantly enhancing emergency responsiveness and accessibility during tsunami events. In the event of a tsunami or other natural disaster, the Project is designed to avoid creating barriers to emergency access or hindering evacuation routes. The design of the project will prioritize unimpeded access for emergency vehicles including ambulances, fire trucks, and police vehicles to critical areas.</p>
<p>Consider how difficult traffic will be and add to that the next tsunami and how already difficult it is to evacuate the coastal area.</p>	<p>Pamela Wang</p>	<p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The traffic analysis shows that the addition of project-generated traffic would not result in any significant roadway operations impacts under typical peak hour conditions, when traffic volumes are highest.</p> <p>The KBMP is designed to mitigate tsunami threats by improving connectivity and emergency access through infrastructure enhancements. The construction of Old Kona Road, linking Kamehameha III Road and Kaleiopapa Street, provides a crucial alternative evacuation route, significantly enhancing emergency responsiveness and accessibility during tsunami events. In the event of a tsunami or other natural disaster, the Project is</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		designed to avoid creating barriers to emergency access or hindering evacuation routes. The design of the project will prioritize unimpeded access for emergency vehicles including ambulances, fire trucks, and police vehicles to critical areas.
<b>Boat Trailer Parking</b>		
<p>The project also proposes to relocate the existing commercial snorkel boat vendors to the other side of the launch ramp, which means the snorkelers will have to walk across the purportedly congested boat ramp to get to the dock area and load on the snorkel boats. (Note: With the current buildings next to the dock, the snorkel visitors don't have to walk across the busy double-lane boat launch ramp. (One can just imagine how many people will get run over by people either trying to launch and/or pull boats from the water during the day and at night.) On this basis alone, the EIS must be rejected and further studies conducted.</p>	<p>Jeff Caufield</p>	<p>The KBMP is designed to reorganize uses and activities within the Project Area to better reflect the cultural significance of the area and to support a more harmonious relationship between users, place, and purpose. Central to this reorganization is the concept of directing new growth to more appropriate areas. To resolve long-standing conflicts between incompatible uses, the KBMP proposes relocating commercial activities that are currently situated near sensitive cultural sites, to more suitable areas along Kaleiopapa Street. By moving these uses away from the bayfront and heritage zones, the plan protects sacred spaces and allows cultural practices to thrive without interference.</p> <p>The existing ocean recreation vendors currently occupying the buildings along the bayfront will have an opportunity to relocate their operations to the proposed retail center at the corner of Kaleiopapa Street and Ehukai Street. This site was selected as a more suitable location due to its setback from the bayfront and its compatibility with adjacent resort uses (Outrigger Kona Resort and Spa).</p> <p>The relocation of commercial vendors and the addition of dedicated parking facilities will significantly improve pedestrian safety and overall visitor experience. Currently, the lack of adequate parking at the existing bayfront buildings results in visitors parking along informal, unsafe spaces on Kaleiopapa Street, exacerbating congestion and safety hazards. The absence of sidewalks along Kaleiopapa Street compounds the issue, forcing pedestrians to navigate directly within the travel lanes alongside vehicles and boat trailers.</p> <p>A significant component of the Project includes increasing parking capacity to relieve pressure on informal roadside parking.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>Additionally, the retail center will feature ample parking designed to accommodate visitors and customers effectively. Pedestrian pathways connecting these parking areas to community spaces along the bayfront will ensure direct, safe, and convenient access. Strategic placement of clear signage, well-marked crosswalks, and intuitive visual cues will reinforce safe wayfinding practices and encourage pedestrians to avoid walking roadways.</p>
<p>I am a private boater, residing in Kailua Kona, a little under 5 miles from Keauhou Bay. For the last 27 years I have launched my small boat at the boat ramps there. My concern about this plan is my ability to continue to make use of this state-owned facility. Even without the massive new development proposed in this plan, these two small boat ramps and the associated trailer parking area and wash-down area are often over-utilized, requiring a wait to launch, a wait to wash down, and sometimes a long drive to park along the shoulder of Kaleiopapa Rd. when the 16 provided trailer parking stalls are occupied. The Kamehameha Schools documents are vague, perhaps deliberately, regarding the fate of these critical trailer stalls in their plans, as well as on the continued availability of road shoulder trailer parking. The 2021 conceptual plan drawing shows these 16 stalls sort of blurred out, implying that they may be eliminated. It shows 8 new stalls a little further up the road. Without further clarification I can only assume that KS intends to cut the boat trailer parking in half. This would change the situation from a condition of frequently inadequate trailer parking to one of guaranteed frustration, aggravation, and user conflict. It's not clear if KS intends to change the current long-term boat storage area on the north side of the bay to short-term trailer parking, as it is labeled "boat trailer storage" on their drawing, but this is not a feasible solution to the day-use trailer parking problem. After parking the trailer at the north end of the bay, the boater would have to walk all the way around the bay back to the boat ramp, where there would be a line of angry boaters waiting to launch at the ramp occupied by his boat. The net</p>	<p>Douglas Perrine</p>	<p>Contrary to your concern, the implementation of the Project will not reduce the number of available parking spaces. Instead, it will improve access to parking for boaters, ensuring they have more reliable spaces near the launch ramps.</p> <p>For clarity, it is important to emphasize two key points: firstly, Kamehameha Schools does not own or control the location of the existing 16 trailer stalls. This area is not shown on the project's site plans as these lie outside the Project Area boundaries and are beyond KS's jurisdiction. Secondly, Kamehameha Schools does not own Kaleiopapa Street and therefore has no authority to regulate or enforce parking restrictions, including any potential limitations regarding trailer parking along the roadway.</p> <p>Recognizing the importance of boat trailer parking, the KBMP explicitly aims to enhance parking availability in the vicinity. This includes the expansion and resurfacing of the existing north-side trailer parking lot along Kamehameha III Road, increasing its capacity to a total of 34 stalls, an addition of 15 spaces over its current count. Kamehameha Schools' intention is to continue the existing use as storage and long-term vessel parking.</p> <p>Additionally, the KBMP proposes creating a new trailer parking area south of the bay along Kaleiopapa Street, adding an additional 8 trailer parking stalls.</p> <p>These enhancements collectively demonstrate Kamehameha Schools' commitment to providing adequate, safe, and accessible parking for boaters utilizing the bayfront area.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>effect of cutting the number of trailer parking slots near the ramp in half, for me, would be that I would be denied use of the launching ramps I have used for over a quarter of a century now. I could not justify navigating my trailer through morning rush hour traffic to reach Keauhou Bay only to find that all the trailer parking was occupied or that there was a huge line of boats waiting for the owners of the boats ahead of them to make the long walk back from the north side of the bay. Please note that the 8 proposed new stalls occupy an area of shoulder that is currently available for trailer parking, so the net gain is perhaps only 6 stalls. Presumable KS will also block or ban parking on the remaining shoulders of Kaleiopapa, eliminating at least 6 potential parking spots for a boat trailer. This would mean the net number of available trailer stalls will decrease from about 24 to 8, or a third of what is presently not quite adequate. If KS presents a plan that guarantees an increase of available boat trailer parking close to the ramp, then I will not be personally adversely affected by their development plans, as far as I can tell, but if they actually reduce the available trailer parking from 16 stalls plus shoulder parking to only 8 stalls, as implied in their diagram, I will be cut off from a cherished part of my life. All private boaters and probably most commercial operators using the Keauhou boat ramps will likewise be severely adversely affected. We can expect that some companies might go out of business, and that some boaters might become victims of the violence that sometimes occurs when alcohol mixes with boating and there is some disagreement about how much time someone is taking at a boat launch or wash down area.</p>		
<p>However, DOBOR has concerns about the proposed relocation of boat trailer parking. The DEIS calls for the expansion of the boat trailer parking on KSBE's lands in Vol. 1, page 1-15, page 3-25, figure 3-24 &amp; Vol. II, Preliminary Engineering Report, page 1-1, while also calling for relocation of existing boat trailer parking from the current</p>	<p>Meghan Statts (DLNR)</p>	<p>Mahalo for your continued collaboration on this important effort. Kamehameha Schools acknowledges DOBOR's position that leasing property within the Project Area for boat trailer parking expansion would not be feasible or desired. Accordingly, the FEIS has updated text regarding the potential relocation of existing DOBOR boat trailer parking facilities.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>location under the DOBOR jurisdiction along Kaleiopapa St. (Vol. 1, page 1-13).</p> <p>In previous conversations with KSBE, DOBOR's Administrations has made it clear that DOBOR would not be interested in leasing property from KSBE to construct and relocate the boat trailer parking. DOBOR would not object KSBE expanding and/or relocating boat trailer parking within KSBE property.</p> <p>In addition to DOBOR's concerns regarding relocating existing boat trailer parking, the new parking area as proposed may not provide adequate room to maneuver vehicles with trailers attached and would be further back from the boat ramp than the existing parking area, which may negatively affect boaters' ability to launch and retrieve their boats. DOBOR operates the boat ramp at TMK: (3) 7-8-012:008 and needs to provide trailer parking for recreational boaters. The existing boat trailer parking area located at TMK: (3) 7-8-010:072 is the only DOBOR property capable of accommodating this use.</p>		<p>Kamehameha Schools also understands that DOBOR would not object to Kamehameha Schools expanding and boat trailer parking within the Project Area. Kamehameha Schools intends to proceed with entitlements for the proposed boat trailer parking area located south of the bay and may pursue options for a qualified third-party operator to manage the facility.</p> <p>Kamehameha Schools acknowledges DOBOR's concern about the configuration and location of the proposed new boat trailer area. Consultation and discussions with DOBOR will continue during land use approvals and during design review and approval of construction plans.</p>
<b>Opposing Old Kona Road</b>		
<p>I am also against the development of Old Kona Road, as this also seems to be carved right into a fragile ecosystem. If it does anything at all to mitigate traffic congestion I believe it will be offset by the additional traffic that the resort will create and all the additional parking services that will be entailed.</p>	Jessica Kuzmier	<p>The KBMP proposes reactivating the historic Old Kona Road as a throughway to better manage traffic flow and redirect it away from sensitive cultural areas. The through road connection of Old Kona Road is proposed as a low-speed, low-volume roadway with traffic calming devices (e.g., speed humps) that will provide local access and circulation to uses within the site.</p> <p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the Project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		The Biological Assessment, detailed in Appendix K, determined that the area mauka of ‘Ahu’ula Cliff along Old Kona Road is predominantly covered by invasive plant species, including haole koa ( <i>Leucaena leucocephala</i> ), kiawe ( <i>Prosopis pallida</i> ), and fountain grass ( <i>Pennisetum setaceum</i> ). The KBMP proposes ecological restoration efforts involving the removal of invasive species, re-establishing native vegetation, and providing long-term stewardship of the cultural landscape to revitalize the environmental and cultural integrity of the area.
2. DO NOT make the Old Kona Road a thoroughfare. Land use on the north end of Keauhou Bay should focus on the physical and cultural revival of the Hōlua. Do not use Old Kona Road as a connector between Kamehameha III Road and Kalieopapa Road, as this would abolish all hopes of restoring the Hōlua. Extend Old Kona Road from its joint with Kalieopapa on the south side of the bay and pave just as far as is needed to serve the resort development above the cliffs and no farther.	Michael Herbert	<p>The KBMP proposes reactivating the historic Old Kona Road as a throughway to better manage traffic flow and redirect it away from sensitive cultural areas. The through road connection of Old Kona Road is proposed as a low-speed, low-volume roadway with traffic calming devices (e.g., speed humps) that will provide local access and circulation to uses within the site.</p> <p>The KBMP recognizes the Hōlua slides’ cultural and historical importance. The exact historic alignment of the Hōlua slides is unknown; however, the project seeks to honor its projected course by preserving open spaces along the areas where the slide may have traversed. Additionally, the project proposes installing an ‘ili (stone pebble) treatment along the Old Kona Road, marking the potential crossing location of the hōlua to further commemorate this culturally significant feature.</p>
<b>Infrastructure and Utilities</b>		
Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort? Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development? As of now, the Big Island’s Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means these resources and infrastructures will be taxed even more in the near future.	Donald Robert Berger Stephen Goudreau Sara Irwin Goudreau Lucia Kaplan	<p>Section 4.12 of the EIS includes detailed evaluations of the existing infrastructure capacities at Keauhou Bay, such as water, wastewater, solid waste, power, and telecommunications, along with potential impacts, and the necessary upgrades to support the KBMP.</p> <p>The EIS includes thorough analysis to verify that Hawai’i Island’s infrastructure systems can accommodate the proposed KBMP. The Project is designed to mitigate potential impacts on local resources through strategic planning, infrastructure upgrades, and sustainable design practices. With the implementation of these</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
	Rebecca Melendez Sherina Ong Roslyn Patrick-Sunnes Deborah Sevy Mayari Sherina Ong Lisa Thatcher David Hill Kaleihua Kamaka Kellie Kilcuo William Lim Jenni Lund Alicia Morrier Belinda Pate Jo Quinn Jason Rigmaiden Bryn Stites Wim Verkaok Jyn Watson Celia Murry Riley Reynolds Sharron Rudolph Curt and Ellen Winningham	actions, the Project is anticipated to contribute positively to the region's growth while minimizing adverse impacts on the island's resources and infrastructure.

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>This project will have a negative impact on the wildlife of Keauhou bay, and the surrounding areas. I oppose this plan and would like to see the bay stay the way it is. The infrastructure in Kona is already out of date and cannot support more people. The life of the land is perpetuated in righteousness.</p>	<p>Justin Broderick</p>	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.</p> <p>The KBMP proposes a comprehensive, long-term management strategy to better organize activities and uses throughout the bay. By improving infrastructure, guiding visitor behavior, and protecting sensitive cultural and natural resources, the KBMP will help reduce impacts on the environment and promote sustainable use of the area. As a result, the project is expected to have beneficial long-term effects on environmental stewardship and resource conservation.</p> <p>Regarding concerns about infrastructure, Kamehameha Schools has thoroughly assessed the existing capacity of utilities and infrastructure and has collaborated with local agencies to verify that Hawai'i Island's infrastructure systems can accommodate the proposed KBMP. The Project is designed to mitigate potential impacts on local resources through strategic planning, infrastructure upgrades, and sustainable design practices. With the implementation of these actions, the Project is anticipated to contribute positively to the region's growth while minimizing adverse impacts on the island's resources and infrastructure.</p>
<p>Reason #5 The Big Island Doesn't Have the Resources and Infrastructure for Another Resort Please see the articles below because the Big Island doesn't have the resources or infrastructure to safely add another resort development on island and these other NEWS and Research articles prove this point.</p> <p>Big Island resources and infrastructure are currently being negatively affected from the development that is on island already, and there are years of new development that have already been approved, before having safe resources and infrastructures for new developments. With these scientifically proven articles by some of the most professional scientists in the world, they say the a serious</p>	<p>Rebecca Meledez                      Sarah Dahm                      Melanie Diehl                      Claudia Kane                      Heather Tribolet                      Donna Cherrier</p>	<p>Section 4.12 of the EIS includes detailed evaluations of the existing infrastructure capacities at Keauhou Bay, such as water, wastewater, solid waste, power, and telecommunications, along with potential impacts, and the necessary upgrades to support the KBMP.</p> <p>The EIS includes thorough analysis to verify that Hawai'i Island's infrastructure systems can accommodate the proposed KBMP. The Project is designed to mitigate potential impacts on local resources through strategic planning, infrastructure upgrades, and sustainable design practices. With the implementation of these actions, the Project is anticipated to contribute positively to the region's growth while minimizing adverse impacts on the island's resources and infrastructure.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
population increase, as well as development and resort runoff that happens because of parking lots.		
Improve the bathroom's and keep the undeveloped area undeveloped	Marcy O'Malley	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.</p> <p>The KBMP proposes a comprehensive, long-term management strategy to better organize activities and uses throughout the bay. By improving infrastructure, guiding visitor behavior, and protecting sensitive cultural and natural resources, the KBMP will help reduce impacts on the environment and promote sustainable use of the area. As a result, the project is expected to have beneficial long-term effects on environmental stewardship and resource conservation.</p> <p>Implementation of the KBMP will allow Kamehameha Schools to better maintain existing bathroom facilities.</p>
<p>Aloha, Can you please show me where in Kamehameha Schools EIS does it have any researched evidence that Big Island resources and infrastructure are able to accommodate another resort? There has been a serious increase in population after COVID and after the Maui fires, and I have included many different articles that show Big Island resources and infrastructure already are having serious NEGATIVE issues supporting the people who live here and visit here. Can you please read the articles below about Big Island resources and infrastructure and see that the Big Island doesn't have the resources or infrastructure for another resort development? Has Kamehameha Schools EIS done any sincere calculated reports that can prove this 150 rooms bungalow resort that could bring in over 300 extra visitors on island or more when maxed out, have they proven in any way that the island resources and infrastructure can handle this? This is a survey that was copyright 2013 and that is eleven years ago so please consider the survey numbers have increased by a lot. This is just to give you an idea of what tourism resources consume on island. Please,</p>	Rebecca Melendez	<p>Section 4.12 of the EIS includes detailed evaluations of the existing infrastructure capacities at Keauhou Bay, such as water, wastewater, solid waste, power, and telecommunications, along with potential impacts, and the necessary upgrades to support the KBMP. Specifically, details concerning Water Supply can be found in Section 4.12.1, Wastewater Treatment and Disposal is discussed in Section 4.12.2, Solid Waste is addressed in Section 4.12.3, Power infrastructure is detailed in Section 4.12.4.1, and Telecommunications services are outlined in Section 4.12.4.2.</p> <p>The EIS includes thorough analysis to verify that Hawai'i Island's infrastructure systems can accommodate the proposed KBMP. The Project is designed to mitigate potential impacts on local resources through strategic planning, infrastructure upgrades, and sustainable design practices. With the implementation of these actions, the Project is anticipated to contribute positively to the region's growth while minimizing adverse impacts on the island's resources and infrastructure.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>see this survey report on this link  <a href="https://kohalacenter.org/archive/pdf/Research_BI_ResourceUseWasteGenerationTourism.pdf">https://kohalacenter.org/archive/pdf/Research_BI_ResourceUseWasteGenerationTourism.pdf</a>This is in the Introduction, "The tourism industry annually attracts about 6 million visitors to the state of Hawaii (Hawaii Tourism Authority 2010), and it accounts for one-quarter of the state's gross domestic product and one-third of its jobs (DBEDT 2010; Thomas 2009). The island of Hawaii (the Big Island) welcomes more than one million tourists annually. The highest growth (67%) in daily visitors on the Big Island was registered between 1990 and 2007 (DBEDT 2008). It is widely known that the tourism industry is an economic engine for the Big Island. Tourism utilizes a significant share of the total electricity and fuel used on the island; however, the total amount and detailed breakdowns have not been quantified. The economic growth of the island must be carefully assessed and managed to mitigate negative impacts on its environment and sustainability." This information is on page 8 under Summary and Conclusion, "The estimates show that the tourism sector surveyed for this study accounts for 21.7% of the island's total energy consumption, 44.7% of the islandwide water consumption, and 10.7% of the island-wide waste generation." The above information is a report that shows around what the tourism industry consumed in island resources 11 years ago. Does Kamehameha Schools EIS have any kind of report like this one, because it needs to be shown that Big Island has the resources for this kind of resort development.</p> <p>The articles below will show that Big Island DOES NOT have the resources and infrastructure for another resort development and for this you must reject this EIS and show that it WILL HAVE NEGATIVE IMPACT on Big Island.</p> <p>Big Island Now poll No.27 results: More than one solution needed to help extend life of West Hawai'i landfill September 17, 2023 The West Hawai'i Sanitary Landfill, the only</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years. (File photo) Of the 900 total votes in our most recent poll, which asked people to weigh in on the best way to extend the life of the Big Island's only remaining landfill, all of the above was the most popular answer, garnering 274 votes, or 30%. The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish. A county commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill By Megan Moseley</p> <p>September 6, 2023 Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill. During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity. With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions. Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa. "Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill." The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>achieve goals related to climate resiliency, renewable energy,sustainable agriculture, and zero waste</p> <p>Up ForLandfills'Gentle' demolition strategies can help preserve resourcesPAULA BENDER APRIL 2, 2024 As Hawai'i government officials grapple with thechallenge of limited landfill space statewide, federal restrictions set inplace by the Environmental Protection Agency are ruling out possible locationsthat were once considered for new landfills.Hawaii Act 73 states landfills must be locatedat least half a mile from residential areas; are prohibited from being locatedin areas with heavy rain and steep slopes, as well as agricultural and/orconservation lands; above aquifers; 300 feet beyond streams; and 1,000 feetbeyond the ocean.New landfills are also now prohibited frombeing created in tsunami inundation zones, 100-year flood zones and wetlands.There are also concerns that landfills near airports will attract birds,resulting in damage to aircraft and fatalities among pilots and passengers.The City &amp; County of Honolulu is in the process ofidentifying its next landfill and it doesn't want one any bigger or more activethan absolutely necessary</p> <p>With moderate to severe drought conditions beingreported across Hawai'i island, local water department officials issued astatement this week on the need for customers to use drinking water wisely.Most of Hawai'i island is under"Moderate Drought" conditions, according to the latest information from the U.S. Drought Monitor. There is anarea under "Abnormally Dry" conditions in South Kona, however there are other,small pockets on the Big Island that are under "Severe Drought". There is evena small spot of "Extreme Drought" in the South Point area of Ka'ū."The National Weather Service'sforecast calls for the existing drought conditions to expand over the entireisland and intensify over the upcoming months due to the ongoing El Niñoevent," reported the Hawai'i County Department of Water Supply. "Peak drynessis expected to occur from around January through February 2024. The El Niñoevent</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>will likely persist well into spring 2024 years have seen compounding problems: less rain, leading to significant droughts, and repeated jet fuel leaks and PFAS chemical spills contaminating watersystems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the world's largest surfing wave pool opened up on the island —filled with freshwater."They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe." "We are in a water crisis, that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawai'i, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't. Because this is an island parts need to be shipped and the power plant has generators that are not working and because of this, and other reasons, the Big Island needs to seriously conserve power so that everyone will have power, and if this can happen once it can happen again. , Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages. In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HECO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand. "We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity use is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>outages."Hawaiian Electric announced Mondayafternoon that it may initiate rolling outages in parts of Hawaii Islandbecause of the unavailability of several generators and lower than normal windand solar resources.In a news release, the utility saidthat outages could start as early as 6:30 p.m. and rotate around the island for30-minute intervals. The impacted areas and the timing of the outages will bebased on wind generation and the amount of electric demand that needs to bereduced. Individuals who are dependent on electrically powered life supportmedical equipment are advised to arrange for a backup power supply.The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month. Big power supply problems continue to plague Hawaii island Apr 8, 2024 The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants whilepart of the largest plant undergoes an annual overhaul. All four of theseaffected power plants are owned by the utility or an affiliate of its parentcompany.Also contributing to thetrouble is lower output from a geothermal plant, which has the third-largestgeneration capacity on the island and is owned by an independent operator."This is an unusualsituation, driven mainly by the unavailability of several large generators thathave experienced mechanical problems, are at reduced output, or are undergoingmaintenance, " HawaiianElectric said in its March25 announcement asking customers to use less electricity,especially on weekdays from 5to 9 p.m.The company explainedthat it faces an "extremely tight " supply of power at peak useperiods, especially when production from wind, solar and hydroelectricfacilities is lower than normal. Those sources of variable, renewable energycan supply up to 15 % of electricity needs on the island."Without enoughsupply to meet electricity demand, the company may initiate rolling outages ofup to an hour around the island, " the March25 announcement</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>said. <a href="https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island">https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island</a> COMMUNITYHawaii Island customers urged to reduce electricity use through April</p> <p>BY SARAHYAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024 What You Need To Know Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity</p> <p>When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use</p> <p>Even when no alerts are issued, customers – including hotels and large retailers – are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays</p> <p>If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island</p>		
<p>Another pressing issue for this area is water and sewage. Every late summer and fall, we have had to conserve water in the Keauhou/Kona area. Where are they going to get the extra water for 300 people? Resort people are not going to restrict their use of water. They are on vacation and need 2-3 showers a day not being accustomed to this hot humid weather. You're calling this an ECO-Resort – does that mean they expect to conserve water their entire vacation and flush just once a day. Tell that to the Japanese and they will laugh at you. (I have had that happen to me.) Where is the sewage going to go? Septic tanks for each unit. What about an overflow? Does that go downhill into the bay? Then, all water sports will be halted in Keauhou Bay for weeks or months? Bringing more people into an area can never be good for the Ecology? Who are you trying to fool? Current infrastructure cannot handle a resort here. I know this area is zoned for resorts. Right now, we have one resort</p>	Cheri Uno	<p>Section 4.12 of the EIS includes detailed evaluations of the existing infrastructure capacities at Keauhou Bay, such as water, wastewater, solid waste, power, and telecommunications, along with potential impacts, and the necessary upgrades to support the KBMP. Specifically, details concerning Water Supply can be found in Section 4.12.1 and Wastewater Treatment and Disposal are discussed in Section 4.12.2.</p> <p>The EIS includes analysis to verify that Hawai'i Island's infrastructure systems can accommodate the proposed KBMP. The Project is designed to mitigate potential impacts on local resources through strategic planning, infrastructure upgrades, and sustainable design practices. With the implementation of these actions, the Project is anticipated to contribute positively to the region's growth while minimizing adverse impacts on the island's resources and infrastructure.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>the Outrigger on the edge of Keauhou Bay. It has been here before I came here in 1979. Before people realized the Hawaiian historic area that this is. I came here for the beauty and quiet of this historical area. Resorts are better kept to the northern end of the island where everyone expects to be on vacation with people in the pool playing Marco Polo and partying to the max. That was what I saw when looking for a place in Maui in 1978.</p>		<p>The EIS outlines the Project's intent to connect to existing water infrastructure managed by the Department of Water Supply (DWS). Ongoing consultation with DWS is underway to ensure that the Project's water demand remains within allocated limits. According to Section 4.12.1, the Project's estimated average water demand will be approximately 95,879 gallons per day (GPD). This is within Kamehameha Schools existing allocated water entitlement.</p> <p>To mitigate water usage, the Project incorporates water conservation strategies into its design, including efficient irrigation methods such as drip systems and moisture sensors, the utilization of non-potable water sources for irrigation, the planting of drought-tolerant species, and the installation of ultra-low-flow fixtures and toilets. Coordination with the County DWS will continue as the project design progresses.</p> <p>EIS Section 4.12.2 discusses wastewater treatment and disposal. The project does not propose septic tanks for each unit. Instead, the wastewater generated by the Project will be conveyed through a sewer main along Old Kona Road, which will connect to the existing sewer infrastructure. The wastewater will then be conveyed to the He'eia Wastewater Reclamation Facility (WWRF), where it will be treated. Further study will be needed to determine if any capital improvements of the WWRF and facilities leading to it will be required to accommodate an increase in flow from the Project.</p>
<p>As a resident, I am also concerned about further stressing the infrastructure in the Kona area. We have regular power outages, low hospital capacity, water system failures, sewage spills, and already inadequate road systems, especially in tsunami evacuation areas. Creating another tourism area in an already stressed bay at a time when the state is trying to shut down vacation rentals, which disperse the impact of tourism more widely, makes no sense. Let's take care of the land and water and people already here then talk about more tourist development. We don't want to be another Waikiki.</p>	Keri Jones	<p>Section 4.12 of the EIS includes detailed evaluations of the existing infrastructure capacities at Keauhou Bay, such as water, wastewater, solid waste, power, and telecommunications, along with potential impacts, and the necessary upgrades to support the KBMP.</p> <p>The EIS includes analysis to verify that Hawai'i Island's infrastructure systems can accommodate the proposed KBMP. The Project is designed to mitigate potential impacts on local resources through strategic planning, infrastructure upgrades, and sustainable design practices. With the implementation of these actions, the Project is anticipated to contribute positively to the</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		region’s growth while minimizing adverse impacts on the island’s resources and infrastructure.
What are the specifics on the launching ramps? Moved, updated, increased to three?	Randy Williams	The launch ramps mentioned are located outside of the project area and therefore, there are no plans for moving, updating, or increasing the ramps. These ramps are owned and operated by the State of Hawai’i.
Also consider that most tourists want to be near Waikoloa where the infrastructure supports their needs	Pamela Wang	Keauhou Bay offers a different, yet equally valuable, opportunity for visitors that prioritize sustainable development and cultural sensitivity. The project’s infrastructure is designed to meet the needs of users without overburdening local resources.
Water Supply at page 4-136: The water main that will supply the Project passes through the near shore area. The DEIS acknowledges that this area will be impacted by sea level rise but does not propose any future action. A potable water main break will have minimal effect on the bay but would severely affect all the tenants and users of the bay. This main has broken in the past and our unit was without water for a significant period. This risk might be mitigated by relocating the water main to the Old Kona Road	Joanne (Jody) Wheeler	<p>The EIS outlines the Project’s intent to connect to existing water infrastructure managed by the Department of Water Supply (DWS) to minimize the extent of ground disturbance required for construction. As the DWS currently owns and manages the area’s water system, Kamehameha Schools will continue to coordinate closely with DWS, facilitating necessary access and supporting ongoing maintenance of the water supply infrastructure.</p> <p>Kamehameha Schools acknowledge the threat that sea level rise poses on existing infrastructure and will continue to collaborate with the County to explore proactive solutions to strengthen the overall system’s resilience against future climate challenges.</p>
Infrastructure Strain: Adding high-end vacation rentals and commercial spaces could strain local infrastructure, primarily the archaic sewage and waste management systems that are currently in place and perpetually challenged	Bryce Groark	<p>Section 4.12 of the EIS includes detailed evaluations of the existing infrastructure capacities at Keauhou Bay, such as water, wastewater, solid waste, power, and telecommunications, along with potential impacts, and the necessary upgrades to support the KBMP. Specifically, details concerning Wastewater Treatment and Disposal are discussed in Section 4.12.2.</p> <p>The EIS includes analysis to verify that Hawai’i Island’s infrastructure systems can accommodate the proposed KBMP. The Project is designed to mitigate potential impacts on local resources through strategic planning, infrastructure upgrades, and sustainable design practices. With the implementation of these actions, the Project is anticipated to contribute positively to the</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>region’s growth while minimizing adverse impacts on the island’s resources and infrastructure.</p> <p>Wastewater generated by the Project will be conveyed through a sewer main along Old Kona Road, which will connect to the existing sewer infrastructure. The wastewater will then be conveyed to the He’eia Wastewater Reclamation Facility (WWRF), where it will be treated. Further study will be needed to determine if any capital improvements of the WWRF and facilities leading to it will be required to accommodate an increase in flow from the Project.</p>
<p>This involves creating the roadway, sewer, utilities, plus construction and furnishings. Financing to renovate and upgrade the Outrigger might be a far safer ROI for KS. I also question that the claim cited in the first paragraph of section 2.1.3 “the hustle and bustle of ocean commercial operations catering mainly to visitors cause many local families, with some long-standing generational ties to the bay, to no longer feel welcomed”. While this may be true in the case of a very few individuals, it doesn't substantiate the investment to solve their feelings.</p>	Tom Fetter	<p>In 2010, Kamehameha Schools initiated consultation with lineal descendants of Keauhou and Kahalu’u, which continues today. During an early consultation meeting in the Fall of 2016, ‘ohana of Keauhou and Kahalu’u shared concerns about long-standing issues in the area. They cited congestion, limited access, and the impact of inappropriate commercial and recreational activities that have eroded the bay’s historical and cultural identity. Please refer to Chapter 7 of the FEIS, detailing the level of consultation conducted with lineal descendants as well as other stakeholder groups. Input from lineal descendants and the community guided the formation of the KBMP and identification of the plan’s management strategies.</p> <p>The Outrigger is making their own investment on upgrades to their leasehold property and is not a KS expense. The low-impact lodging property offers the a unique and different product type than the Outrigger accommodations.</p>
<p>The number one problem at Keauhou Bay has always been the sewage system. I find it alarming that the state does not address our sewage pipe problems that run into our oceans and easily passes that off to development companies. To remain triple AAA waters without periodic alerts of high bacteria counts not only in Kona but all islands. I also beg the state to apply for the ‘Infrastructure Act’ to ensure all islands can renew a safe transition to a modern healthy sewage pipe system.</p>	Jan Brinkman	<p>Section 4.12 of the EIS includes detailed evaluations of the existing infrastructure capacities at Keauhou Bay, such as water, wastewater, solid waste, power, and telecommunications, along with potential impacts, and the necessary upgrades to support the KBMP. Specifically, details concerning Wastewater Treatment and Disposal are discussed in Section 4.12.2.</p> <p>The EIS includes analysis to verify that Hawai’i Island’s infrastructure systems can accommodate the proposed KBMP. The Project is designed to mitigate potential impacts on local resources</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>through strategic planning, infrastructure upgrades, and sustainable design practices. With the implementation of these actions, the Project is anticipated to contribute positively to the region's growth while minimizing adverse impacts on the island's resources and infrastructure.</p> <p>Wastewater generated by the Project will be conveyed through a sewer main along Old Kona Road, which will connect to the existing sewer infrastructure. The wastewater will then be conveyed to the He'eia Wastewater Reclamation Facility (WWRF), where it will be treated. Further study will be needed to determine if any capital improvements of the WWRF and facilities leading to it will be required to accommodate an increase in flow from the Project.</p> <p>Kamehameha Schools supports the state's application for funding under the Infrastructure Act to support the modernization of sewage systems across the islands.</p>
<p>I know from friends and from news sources that Hawaii has issues with sufficient water and sewage treatment. It seems sensible to make sure these issues are addressed before putting more strain on the existing systems.</p>	<p>Laurel Terry</p>	<p>Section 4.12 of the EIS includes detailed evaluations of the existing infrastructure capacities at Keauhou Bay, such as water, wastewater, solid waste, power, and telecommunications, along with potential impacts, and the necessary upgrades to support the KBMP.</p> <p>The EIS includes analysis to verify that Hawai'i Island's infrastructure systems can accommodate the proposed KBMP. The Project is designed to mitigate potential impacts on local resources through strategic planning, infrastructure upgrades, and sustainable design practices. With the implementation of these actions, the Project is anticipated to contribute positively to the region's growth while minimizing adverse impacts on the island's resources and infrastructure.</p>
<p>The existing water main that will supply the Project passes through the near shore area. (See, Dashed blue line in Fig. 4-43 above.) The EIS acknowledges that this area will be impacted by SLR but does not propose any future action. A potable water main break will have minimal effect on the bay but would severely affect all of the tenants and users of</p>	<p>Carolyn Leilani</p>	<p>The EIS outlines the Project's intent to connect to existing water infrastructure managed by the Department of Water Supply (DWS) to minimize the extent of ground disturbance required for construction. As the DWS currently owns and manages the area's water system, Kamehameha Schools will continue to coordinate</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>the bay. This main has broken in the past. This risk could be mitigated by relocating the water main to the Old Kona Road.</p> <p>Electrical and Telecommunications lines also pass through the near shore area. The EIS acknowledges that this area will be affected by SLR but does not propose moving these lines. This risk should be totally mitigated by relocating the electrical and telecommunications lines to the Old Kona Road.</p>		<p>closely with DWS, facilitating necessary access and supporting ongoing maintenance of the water supply infrastructure.</p> <p>The KBMP proposes to provide electrical and telecommunication services to the Project Area via existing underground distribution systems. As part of this KBMP's planning process, HELCO completed a preliminary engineering analysis of their existing system to determine if any improvements would be needed to accommodate the Project. The analysis concluded that upgrades to HELCO's existing underground distribution system may be needed to provide power to the various Project uses. The recommendations are outlined in Section 4.12.4.1 of the EIS. The analysis did not result in a recommendation to relocate existing systems to Old Kona Road.</p> <p>Kamehameha Schools acknowledge the threat that sea level rise poses on existing infrastructure and will continue to collaborate with the County and HELCO to explore proactive solutions to strengthen the overall system's resilience against future climate challenges. Kamehameha Schools is willing to cooperate with the various utility providers should they choose to relocate services in the future as part of their mitigation plans for seal level rise</p>
<p>Also, further tourist influx will add to the island's electrical needs which are barely serving our current population now. Contending with waste from a larger tourist influx also puts added stress on West Hawaii's waste management where we already take on the trucked waste from the East side of the island. Water conservation and mandatory lessening of water usage from residents is unfair if we allow tourist or further planned development to use water freely and largely while locals are called to conserve.</p>	Nancy Vidana	<p>Section 4.12 of the EIS includes detailed evaluations of the existing infrastructure capacities at Keauhou Bay, such as water, wastewater, solid waste, power, and telecommunications, along with potential impacts, and the necessary upgrades to support the KBMP.</p> <p>The EIS includes analysis to verify that Hawai'i Island's infrastructure systems can accommodate the proposed KBMP. The Project is designed to mitigate potential impacts on local resources through strategic planning, infrastructure upgrades, and sustainable design practices. With the implementation of these actions, the Project is anticipated to contribute positively to the region's growth while minimizing adverse impacts on the island's resources and infrastructure.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>My biggest concern with the Kamehameha Schools (KS) proposed project is the already fragile water quality of the bay. There should be no development of any kind near Keauhou Bay until the sewer situation is resolved in the area. Several waterfront homes on the north side of this bay have only cesspools. And even the few that have septic tanks are at too low an elevation and are too close to the ocean to have adequate leach fields, thus increasing the bacteria levels in the bay. These lots need to be connected to the nearby local private sewer system or the County sewer lines, if the private system is not available. KS's lazy response to this issue in the April 2022 meeting was the area is out of their jurisdiction. Hmm, I bet they would find a way to make it happen if approval of their proposed resort was predicated on getting all the bayfront homes on sanitary sewer line. It would require some work with the local private system and the County DPW, but it is doable. And if the County doesn't have the will to disapprove of this project, the County should make sure the bayfront lots are connected to a sewer line before allowing development of the resort or anything else in the vicinity of Keauhou Bay.</p>	<p>Kathleen McMillen</p>	<p>The Project design incorporates best management practices (BMPs) to mitigate potential impacts on water quality during both construction and ongoing operations. These BMPs are intended to minimize erosion, sedimentation, and runoff that could affect local water quality, particularly in sensitive areas like Keauhou Bay. The design will include measures such as sediment control, stormwater management systems, and proper waste disposal methods to prevent contamination and maintain the integrity of the surrounding ecosystem. These practices will be regularly monitored and adjusted as needed to maintain water quality standards throughout the life of the Project.</p> <p>EIS Section 4.12.2 discusses wastewater treatment and disposal. Wastewater generated by the Project will be conveyed through a sewer main along Old Kona Road, which will connect to the existing sewer infrastructure. The wastewater will then be conveyed to the He'eia Wastewater Reclamation Facility (WWRF), where it will be treated.</p> <p>While Kamehameha Schools may not have direct authority over the wastewater infrastructure serving nearby properties, the Project's commitment to environmental stewardship and water quality improvement will contribute positively to the broader goal of enhancing the health of Keauhou Bay. Kamehameha Schools appreciates your feedback and will continue to engage with relevant stakeholders to protect the sustainable future of the area.</p>
<p>Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT in Keauhou Bay as stated in all the different researched articles below. Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project, because it is scientifically proven that developments pollute nearby waters constantly during development and after.</p>	<p>Donald Robert Berger                      Stephen Goudreau                      Sara Irwin Goudreau                      Lucia Kaplan</p>	<p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term. EIS Section 4.5 discusses Project stormwater management and drainage improvements.</p> <p>The Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
	Rebecca Melendez Sherina Ong Roslyn Patrick-Sunnes Deborah Sevy Mayari Sherina Ong Lisa Thatcher David Hill Kaleihua Kamaka Kellie Kilcuo William Lim Jenni Lund Alicia Morrier Belinda Pate Jo Quinn Jason Rigmaiden Bryn Stites Wim Verkaok Jyn Watson Celia Murry Riley Reynolds Sharron Rudolph Curt and Ellen Winningham	<p>Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
I also worry what all these cars will do to the water quality. The oil, and the tire dust that will run into the bay when it rains. This will be devastating	Paul Koenigshofer	<p>The project's stormwater management plan and long-term Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements.</p> <p>Currently, the lands surrounding Keauhou Bay lack adequate stormwater and drainage infrastructure. As a result, rainfall events can cause untreated runoff and contaminants from roadways and other surfaces to enter directly into the bay. To address this issue, the Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
The bay and beach are already overcrowded. The last thing needed is 100 haole tourists dripping sun lotion in the already contaminated oil fuel filled water.	Jun Sogi	<p>Kamehameha Schools is dedicated to developing the project with a focus on the long-term protection of Keauhou Bay and its water quality. While the project will introduce a controlled increase in visitor accommodations, it will implement measures such as active resource management, signage, and educational programs designed to preserve the integrity of natural resource for future generations.</p>
ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay? Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay. The article below is from NOAA	Michael Hanly	<p>Appendix M to the DEIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. According to the report, the Project is estimated to generate approximately 1,928 new daily weekday vehicle trips.</p> <p>The project's stormwater management plan and long-term Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements.</p> <p>Currently, the lands surrounding Keauhou Bay lack adequate stormwater and drainage infrastructure. As a result, rainfall events can cause untreated runoff and contaminants from roadways and other surfaces to enter directly into the bay. To address this issue,</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>regarding motor vehicle engines and pollution to the sea. What is the biggest source of pollution in the ocean? Most ocean pollution begins on land. "Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea. Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats." Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects News Release September 28, 2022 WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. The Impact Of Stormwater – Car Emissions "Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways."</p>		<p>the Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use approvals and construction plan approvals subsequent to the Final EIS. The proposed improvements will be designed to comply with the County drainage standards, which include the design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p>
<p>As a resident and homeowner here in Kailua Kona I often paddle in Keauhou Bay.</p> <p>I believe your proposed development there will pollute the bay and destroy it for generations to come. I urge you to stop this development!</p>	John Phillips	<p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.
NO!!! Perhaps upgrading the area for boats and trailers but NO to the development of the resort cottages. The impact to this pristine area would be devastating, Most disturbed would be the water quality and negative environmental impact to the wildlife in the bay from runoff. Really? Is this what our ancestors would have wanted?	Myland Hui	The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.
Toxicity and Eutrophication The Project fails to study, analyze, and/or provide projection as to increased toxicity and eutrophication impacts to Keauhou Bay. The decision to position the roadway closer to the Bay increases the potential for toxic pollutants entering the Bay and impacting the Bay's ecosystem. There is no study on the existing toxicity of runoff to the Bay from nearby roadways nor is there a study or projection of the concentration or ecological impact of the Project on future runoff to the Bay. Projects such as resorts with houses, pools, lawns etc. have increased runoff of nitrates and phosphates, which are known to cause eutrophication to water bodies. Golf courses have the potential to release substantial amounts of nitrates and phosphates through runoff. The forested area that the golf course drains into is proposed to be removed by the Project. The DEIS fails to analyze existing conditions as well as impacts of removal of the forest and the construction of the resort and roads on future releases of eutrophic chemical to the Bay. The DEIS is failing to provide the supporting evidence and documentation required in a DEIS	Jennie Shield	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures is provided. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p>
<p>The Project will likely increase the number of visitors and vehicles around the bay, which is likely to increase the quantity of pollutants that may enter the bay and effect flora and fauna within the bay.</p>	Ioana Petrisor	<p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
<p>The Project Fails To Study, Analyze And/Or Provide Projection As To Increased Toxicity And Eutrophication Impacts To Keauhou Bay As discussed supra, the Project proposes to add potentially thousands of new vehicle trips to the area surrounding Keauhou Bay every day. Also, the Project proposes to add a new road closer to the Bay that would carry the additional traffic along with re-routing</p>	Jeff Caufield	<p>The Hawai'i Department of Health (DOH) conducts water quality monitoring as part of its responsibilities under the Clean Water Act on a biennial (two-year) cycle. This assessment evaluates the condition of surface waters across the state, including the identification of impaired water bodies, and supports reporting to the U.S. Environmental Protection Agency through the Integrated</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>existing traffic that is currently roughly more than a ½ mile away and that currently drains to an existing golf course and forest area. Roadways are well known for the ability to accumulate and dispense toxic pollutants during rainfall events. Thus, by positioning the roadway closer to the bay there is the potential for an increase in toxic pollutants entering the bay and impacting existing flora and fauna. There is NO study and/or analysis of the existing toxicity of runoff to the bay from nearby roadways. Additionally, there is NO analysis or projection of the concentration and ecological impact of the project and additional roadway on future runoff to the bay arising from the Project. Not only do roadways accumulate toxicants that runoff the roadways during rainfall events, but projects such as resorts with houses, pools, lawns etc... also have increased runoff of nitrates and phosphates. Nitrates and phosphates, among similar chemicals, are well known to cause eutrophication to water bodies. Golf courses also have the potential to release substantial amounts of nitrates and phosphates through runoff. Currently, the golf course to the east of the bay drains into the forest area, which the Project proposes to remove. The forest area likely acts as buffer that absorbs nitrates and phosphates that are captured by the existing forest area. At times, after heavy rainfall, the end of the bay closest to Project proponent's property can appear slightly green and with surface scum, which suggests that under current conditions there may be nutrient issues with the current runoff. Not only does the EIS fail to analyze existing conditions but also the impact of the removal of the forest, construction of the road and construction of the resort on the future release of eutrophic chemicals to the bay. On this basis alone, the EIS must be rejected and further study conducted</p>		<p>Report, which includes both the 303(d) list of impaired waters and the 305(b) report on overall water quality.</p> <p>Additionally, the DOH Clean Water Branch (CWB) implements a beach monitoring program, which focuses on detecting bacterial contamination in Hawai'i's recreational coastal waters. The program is supported by annual federal funding through the Beaches Environmental and Coastal Health (BEACH) Act and is designed to reduce the risk of illness among beach users. As part of this program, the CWB conducts routine monitoring at public beaches statewide.</p> <p>According to CWB's dataset on Exceedances During Rain Events (1999–2021), Keauhou Bay recorded one exceedance in May 2005. More recently, in February 2023, a beach advisory was issued due to a high bacteria count detected during routine monitoring, with levels reported at 137 colony-forming units per 100 mL. The cause of the exceedance was undetermined. The DOH noted that Keauhou Bay has historically met acceptable beach threshold levels and that no known sources of fecal contamination were identified.</p> <p>The EIS notes that the 2024 State of Hawai'i Water Quality Monitoring and Assessment (Integrated Report), identifies Keauhou Bay as an impaired water body. Turbidity was identified as the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p> <p>Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project Area, surface runoff generally does not occur in the typical rainfall occurrence. As a</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>result, the Project Area does not contain any visible natural gulches or waterways. Runoff typically either percolates into the underlying groundwater or evaporates into the atmosphere.</p> <p>Kamehameha Schools acknowledges the potential for runoff from the golf course located mauka of the Project Area (not owned by Kamehameha Schools) during heavy rain events. Currently, the portion of the Project Area between 'Ahu'ula cliff and the golf course is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or erosion control benefits. The Project does not propose the removal of native forests.</p> <p>The existing Project Area lacks active management and does not contain infrastructure to capture or treat stormwater, resulting in untreated runoff that may flow toward the ocean. With implementation of the Project, drainage improvements and best management practices will be introduced to capture and treat runoff on site. These measures will reduce the potential for stormwater-related impacts, improving current conditions.</p> <p>The Project will be constructed entirely on land and does not include any direct discharges to coastal waters. As a result, water quality conditions in Keauhou Bay are not expected to worsen and may improve through reduced sediment and pollutant loading.</p> <p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas,</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p>
<p>The following comments pertain specifically to water quality issues affecting Keauhou Bay. The draft EIS does not address these nor accounts for the fact that the State and the EPA list Keauhou Bay as an Impaired Water Body under section 303 D of the Clean Water Act (CWA). That law requires that impacts to the Bay be mitigated and that further impairment does not occur. This requirement under the law has not been met. Any development in the watershed needs to be conducted by a careful evaluation of this fact. Under the law, remediation begins by conducting a Total, Maximum Daily Loading study known as a TMDL. The Bay is listed as impaired for exceeding the limits for turbidity. Turbidity has several causes in near-shore waters, such as</p>	<p>Michael Bennett Richard Bennett</p>	<p>The Hawai'i Department of Health (DOH) conducts water quality monitoring as part of its responsibilities under the Clean Water Act on a biennial (two-year) cycle. This assessment evaluates the condition of surface waters across the state, including the identification of impaired water bodies, and supports reporting to the U.S. Environmental Protection Agency through the Integrated Report, which includes both the 303(d) list of impaired waters and the 305(b) report on overall water quality.</p> <p>Additionally, the DOH Clean Water Branch (CWB) implements a beach monitoring program, which focuses on detecting bacterial contamination in Hawai'i's recreational coastal waters. The program is supported by annual federal funding through the</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>runoff water with fine sediments and phytoplankton. Our research shows that turbidity is a problem in Keauhou Bay in the absence of surf events. The turbidity is also due to the overgrowth of marine phytoplankton. Our studies show that turbidity declines along a line moving offshore. The inner Bay has very poor circulation and is where most sediments and other factors causing turbidity arise. Phytoplankton grow in response to increased temperature and nutrient loading in the Bay. The lack of adequate circulation amplifies the problem. The photo was taken in the summer of 2007 in response to concerns about the greening of Keauhou Bay. The brand name on the canoe paddle is not legible. (photo credit Bennett). 2 Figure 1. Nine-month summary of turbidity data for the Bay. (Bennett 2002) The nine-month summary chart above shows that turbidity is worse at the shoreline and decreases non-linearly in waters offshore. The slight rise in turbidity at 250 meters may be more of a phytoplankton effect than sediment. The DEIS makes the following statement regarding groundwater. Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project In this area, surface runoff generally does not occur in the typical rainfall occurrence. Runoff either percolates into the underlying groundwater or evaporates into the atmosphere. There are no drainage reports or calculations on file with the County of Hawai'i or DOT for the adjacent public roadways or surrounding developed properties. However, existing stormwater runoff peak flow estimates for the three (3) drainage basis within the Project Area are presented in Table 4-4. The draft EIS fails to account for surface water runoff from Kamehameha III Road. At the Bayside terminus of the road is a dry well. It is typically loaded with sediment and unable to handle the storm flows that come down the length of the road. Thereafter, water overflows the curb and goes down the driveways and the slope into the Bay. As it does, it picks up considerable sediment and delivers it to the near-shore waters, increasing the turbidity problem (Fig 3). 3 Figure 2.</p>		<p>Beaches Environmental and Coastal Health (BEACH) Act and is designed to reduce the risk of illness among beach users. As part of this program, the CWB conducts routine monitoring at public beaches statewide, including Keauhou Bay.</p> <p>According to CWB's dataset on Exceedances During Rain Events (1999–2021), Keauhou Bay recorded one exceedance in May 2005. More recently, in February 2023, a beach advisory was issued due to a high bacteria count detected during routine monitoring, with levels reported at 137 colony-forming units per 100 mL. The cause of the exceedance was undetermined. The DOH noted that Keauhou Bay has historically met acceptable beach threshold levels and that no known sources of fecal contamination were identified.</p> <p>The EIS notes that the 2024 State of Hawai'i Water Quality Monitoring and Assessment (Integrated Report), identifies Keauhou Bay as an impaired water body. Turbidity was identified as the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>As your study concludes, a significant number of non-Kamehameha Schools properties in the vicinity of Keauhou Bay remain on cesspool systems. The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p> <p>The Hawai'i Water Service Company Inc. is certified by the Hawaii Public Utilities Commission (HPUC) to provide sewer service to the Keauhou area. A sewer service request was submitted for the Project for the estimated wastewater flow projection of 50,925 gallons per day. The Hawai'i Water Service Company Inc. confirmed that the Project will be served. Sewer services will be provided in accordance with the Rules and Regulations and at rates approved</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Rain catchment area and water volume estimate. (Bennett 2002) As calculated above, a one-inch rain can produce over five hundred thousand gallons of water, with most of the flow eroding fine sediments as it enters the Bay (Figure 3). The County of Hawai'i was made aware of this dry well failure four years ago. Some of this water comes off of Kamehameha Schools land. The DEIS statement that rainwater percolates to groundwater suggests groundwater is the terminus and the water does not flow to the sea. For at least 25 years, it was the position of the State that groundwater under the land does not communicate with the sea. Considerable research, such as Knee (2010), Dulai (2020), Peterson (2009), and others, shows that the State's policy is specious and not science-based. The State's anchialine system is a subterranean estuary (Bishop 2015). Consequently, the DEIS must reconsider the implication that the local groundwater is an inconsequential endpoint for fresh and waste water flows. A recent US Supreme Court decision held that wastewater disposal to the nearshore groundwater without the necessary permit was a violation of the CWA (see footnote page 7). 4 Figure 3. Stormwater and sediment Flow into the Bay. The photos suggest considerable sediment erosion into the Bay. Nutrient Degradation and Impairment of the Bay. The draft EIS does not account for the elevated levels of nutrients in the Bay. Again, our research shows that nitrogen and phosphorus exceed state standards. Unlike other locations, it is unfortunate that the Hawai'i Department of Health fails to measure these nutrients in the Bay. Thus, conducting a nutrient analysis of the Bay waters was necessary. That analysis is provided below. 5 Table 1. Nutrient analysis along transects over three quarters of 2019 Note: The NELHA Lab has multiple certifications, including the State Department of Health None of the nutrient values for water collected as shown above met state standards. The elevated nutrients in the Keauhou Bay watershed come from various sources. A common misconception is that fertilizers applied to private</p>		<p>by the HPUC. It is expected that the He'eia WWRF will have capacity to accommodate the increase in wastewater flows.</p> <p>Further study is needed to determine the capacity of the individual components of the existing Keauhou sewer system. Hawaii Water Service, as the operator, will review and determine the need for any improvements or expansions to the existing system to ensure adequate capacity and compliance with regulatory requirements. However, this evaluation typically occurs during the County permitting process, when more detailed project designs are submitted for review and approval. Kamehameha Schools remains open to cooperating with utility providers should they decide to replace or relocate infrastructure in the future as part of their mitigation strategies.</p> <p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>properties and the local golf course are the significant sources. However, research shows that nutrient leaching from the Mauna Kea and Keauhou golf courses is minor compared to the nearby homes on Puako Drive (Dialer 2011). The likely source is the myriad cesspools in the watershed. Some homes on the North peninsula of the Bay are connected to sewers, but most homes are not. The elevated levels of ammonia suggest a water connection to fresh sources of animal and human waste. Ammonia in marine water is quickly converted to nitrate. Our data also shows the nitrogen and phosphorus levels exceed state standards for the Bay. Had the State collected this data, the EPA would declare water Impairment from these nutrients. These elevated nutrients can cause the seasonal "greening" of the marine waters (Smith 2020). The draft EIS makes no mention of nutrient pollution issues and implies that all new developments will be connected to the sewer line that transmits raw sewage to the Heeia wastewater treatment plant. The treated wastewater containing most of the nutrients in human waste is conveyed to the golf course to irrigate the golf course. It is not known the extent to which those nutrients leech into the groundwater and the Bay. It is also not known how much more water the golf course will utilize in the future. Several residences and perhaps some commercial facilities in the proposed development area use cesspools or septic systems for human waste management. The impact on the Bay is significant and needs to be described and mitigated. However, this problem is not mentioned in 6 the DEIS. It is more than advisable that the Project connect all waste systems to the regional sewer. It is well established that sewer lines leak, which is a function of many factors such as piping class and age (Rutch 2006). In the project area, some sewer lines are quite old. One such line on the East shore of the Bay broke during a significant tidal event. The DEIS does not account for sewer line leakage or the risk from extreme tidal events. This problem needs to be evaluated, and where sewer lines are at risk</p>		<p>detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p> <p>It is important to note that Kamehameha Schools does not own or maintain Kamehameha III Road or Kaleiopapa Street. Both roadways are under the jurisdiction of the County of Hawai'i, which is responsible for their upkeep, including any upgrades or modifications to pavement, drainage systems, or related infrastructure. Kamehameha Schools does not have the authority to implement improvements within the public right-of-way or make changes to stormwater systems located within these County-owned corridors. However, implementation of the Project will not increase stormwater runoff to these roads. The existing Project Area is unmanaged and lacks stormwater infrastructure, leading to uncontrolled runoff that may flow toward Kamehameha III Road, occasionally pooling in the cul-de-sac and contributing to overflow toward the ocean. With Project implementation, on-site drainage improvements and best management practices will be incorporated to capture, retain, and treat stormwater within the Project Area, thereby reducing uncontrolled flow onto Kamehameha III Road.</p> <p>Similarly, the existing boat ramp and washdown facilities are owned and managed by the State of Hawai'i. As such, Kamehameha School's has no jurisdiction or authority to regulate</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>and need to be replaced by resilient lines such as High-Density Polyethylene (HDPE). Figure 4. Nitrogen (delta N 15) signatures along the Keauhou Region shoreline (Dailer 2011) Nitrogen Signatures in the Keauhou Area The magnitude of the delta N 15 value indicates the greater contribution of human (animal) waste nitrogen. Raw sewage water is currently conveyed from the hotel at the Bay to the Heeia Wastewater Treatment Plant (HWWTP). The Secondary treated wastewater (WW) is provided to the local golf course for irrigation. How much water the golf course needs or could utilize is unknown. Casual observation of the course suggests that it is under-irrigated. Nutrients in the WW are not removed but beneficial to the grass. Delta N 15 data indicates that the golf course contributes negligible human (animal) nitrogen to the near-shore waters. In contrast, the Delta N 15 values are higher in the Bay proper. The source is likely human waste from cesspools in the immediate region. Less than half of the homes are connected to sewer. It is imperative that the DEIS account for these sources and provide sewer design criteria for all new developments to be connected to the HWWTP. 7 Figure 5. Non-permitted wastewater discharge to the Bay Some years ago, federal funds were provided to upgrade the Bay boat launch facilities. Before the upgrade, boat wash water flowed over the surface and into the Bay. A dry well was installed, and it drained to surface water only a few feet below the drain. Boat wash water is potable water. The wash water contains fish liquids, blood, and particulate fish waste. This wastewater may be a source of ammonia in the Bay. Washed bilge water often contains oil products. The data in Figure 5 is from the wash water surface drain at Honokohau Harbor. Since it is obvious this wash water flows into the Bay in the groundwater, the State should have applied for an NPDES permit. Such a permit is required for any ocean discharge of wastewater, especially in waters known to be Impaired under the CWA. This requirement has been affirmed by the Supreme Court. Conclusions The surface</p>		<p>practices occurring at these facilities. Implementation of the Project is expected to reduce stormwater flow from unmanaged lands which may flow toward the State owned dry well.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>water and groundwater flows from the proposed development and those in the upper watershed need to be considered to ensure that further degradation of this impaired water body does not occur. This is referred to herein as a TMDL. Given the environmental ethics of Kamehameha Schools and the legal history of the Public Trust Doctrine of the State Constitution, we suggest that these environmental impacts described above be studied for the project design and mitigated.</p>		
<p>Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a serious negative impact in Keauhou Bay.</p> <p>Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.</p> <p>Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff."</p> <p>The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," shares that the golf industry uses approximately 50 pesticide active</p>	<p>Nancy Thornes                      Danica Ann Barretto                      Sandra Lee                      Jasmin McCracken                      Jan Salemo</p>	<p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are being held off from running into the Bay by the very trees you want to take down.</p> <p>Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endanger these species.</p> <p>This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.</p>		
<p>Please REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keauhou Bay to become a Bungalow Resort.</p> <p>Please acknowledge that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keauhou Bay as stated in all the different researched articles below.</p> <p>Please, DO NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.</p> <p>I am in full agreement with the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area.</p>	Lillian Ah Nee	<p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
<p>The DEIS adversely and significantly impacts the Bay's water quality: The DEIS states: "The majority of Keauhou Bay has been designated as a Fishery Management Area which is delineated and managed by the DLNR, Division of Aquatic Resources as the bay is bounded by an imaginary line extending from Haiku'ua Point to Kaukala'ela'e Point. The</p>	Tamyra Rice	<p>The U.S. Department of the Interior, U.S. Fish and Wildlife Service, Pacific Islands Fish and Wildlife Office, and the State of Hawai'i, Department of Land and Natural Resources, Office of Conservation and Coastal Lands, were consulted as part of the State's HRS 343 environmental review process.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>FMA designation regulates permitted and prohibited means to catch 3 fish within the area. Other normal state fishing regulations apply (NOAA 2009).” (DEIS at 4.6) However, the DEIS does not address the need to consult the Aquatic Resources Division, which the laws requires here. As noted by Dr. Bennett in his July 24, 2024 Comment Letter: “[T]he State and the EPA list Keauhou Bay as an Impaired Water Body under section 303(d) of the Clean Water Act (CWA). That law requires that impacts to the Bay be mitigated and that further impairment does not occur. This requirement under the law has not been met. Any development in the watershed needs to be conducted by a careful evaluation of this fact. Under the law, remediation begins by conducting a Total, Maximum Daily Loading study known as a TMDL.”</p>		<p>The EIS notes that the 2020 State of Hawai‘i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>A significant number of non-Kamehameha Schools properties in the vicinity of Keauhou Bay remain on cesspool systems. The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean. Further study will be needed to determine if any capital improvements of the He‘eia Waste Water Reclamation Facility WWRF or facilities leading up to it will require improvements with the KBMP’s projected increase in flow. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p> <p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p> <p>The existing Project Area lacks active management and does not contain infrastructure to capture or treat stormwater, resulting in untreated runoff that may flow toward the ocean. With implementation of the Project, drainage improvements and best management practices will be introduced to capture and treat runoff on site. These measures will reduce the potential for stormwater-related impacts, improving current conditions.</p> <p>The Project will be constructed entirely on land and does not include any direct discharges to coastal waters. As a result, water quality conditions in Keauhou Bay are not expected to worsen and may improve through reduced sediment and pollutant loading.</p>
Use of the Boat Ramp and Discharge of Pollutants: Current usage of the boat ramp results in the discharge of pollutants into the Bay. Most boat owners do not use ocean friendly detergents to washdown the boats, but rather harmful cleaners which go directly into Keauhou Bay. Another	Tamyra Rice	The existing boat ramp and washdown facilities are owned and managed by the State of Hawai'i. As such, Kamehameha School's has no jurisdiction or authority to regulate practices occurring at these facilities.

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>product used extensively by commercial fishermen (often late at night) is Clorox bleach, which is essential to sanitizing fish boxes to minimize the proliferation of bacteria, and its transfer to the next catch. There are very few 2-stroke motors (lubricating oil is injected into the gasoline) left in the fleet, but those that remain most likely account for the majority of the oil that gets in the water especially when the engines are being flushed in the washdown area. The DEIS fails to discuss these current negative practices. Mitigation efforts might include stopping the use of the current area for washdown and installing a completely new washdown area for boats- one that is fully isolated and prevents wastewater from entering the Bay</p>		
<p>I strongly oppose any development that will have a detrimental effect on the bay and its fragile ecosystem. Also it is shameful that a hotel is being planned to be built there.</p> <p>From the testimony of Richard Bennet, MS, Phd: Keauhou Bay is a small bay inlet on Hawai'i Island and, as such, is subject to much more degradation than the open shore area of West Hawai'i. As such, the Bay requires special protections. The following comments pertain specifically to water quality issues affecting Keauhou Bay. The Bay is listed as impaired for exceeding the limits for turbidity. Turbidity has several causes in near-shore waters, such as runoff water with fine sediments and phytoplankton. Our research shows that turbidity is a problem in Keauhou Bay in the absence of surf events. The turbidity is also due to the overgrowth of marine phytoplankton. Our studies show that turbidity declines along a line moving offshore. The inner Bay has very poor circulation and is where most sediments and other factors causing turbidity arise. Phytoplankton grow in response to increased temperature and nutrient loading in the Bay. The lack of adequate circulation amplifies the problem.</p>	Sylvie Madison	<p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>



Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called nonpoint source pollution, which occurs as a result of runoff." The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," shares that the golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are being held off from running into the Bay by the very trees you want to take down.</p>		<p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
<p>Over the last decade we have consistently heard from others; past neighbors, environmentalists and scientist studying the long term effects of development at Keauhou Bay being concerned about the quality of water. Currently affected by the existing roadways, the golf course, cesspools and extractive tourism, we believe that this concern has not been adequately addressed. This development plan is misguided and has not sufficiently taken in account the current residential neighborhood or the negative effects on such a small bay that is easily subject to further degradation.</p>	Sally Rankin	<p>The EIS notes that the 2020 State of Hawai'i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>A significant number of non-Kamehameha Schools properties in the vicinity of Keauhou Bay remain on cesspool systems. The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p> <p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Environmental Concerns: The proposed development poses several environmental risks. Increased construction/roads and land use will lead to significant ecological disruption in the Keauhou Bay area, which is already challenged. Ocean water quality is bad in and around the Keauhou and He'eia Bay area due to poor land management practices. Increased issues with your development such as habitat destruction, increased runoff, and pollution will add even more detrimental effects on local wildlife and marine ecosystems.</p> <p>Excessive Concrete and Pollution: The expansion of concrete parking lots and other infrastructural elements will 100% lead to increased pollution and harm the environment. Building a retail center in Keauhou Bay with all those parking spots is totally irresponsible - destroying nature for everyone so that KS can attempt to make a profit.</p>	Bryce Groark	<p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p>
<p>Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after. Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which</p>	<p>Christianne van Rooij</p> <p>Juhl Rayne</p> <p>Koohan Paik-Mander</p> <p>Nancy Thornes</p> <p>Mary True</p> <p>Nawahine Kaho'opi'i</p> <p>Robert Mollers</p>	<p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>occurs as a result of runoff." The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," shares that the golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are being held off from running into the Bay by the very trees you want to take down. 2 Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endangered these species. This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.</p>	<p>Veronique Leferink                      Adele Henkel                      Nathalie Westerberg                      Joanna Weber</p>	<p>reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p>
<p>I am voicing my concerns with the proposed development of Keauhou Bay. During my 13 years of standup paddleboarding and paddling, Keauhou Bay has been the primary location for my water activities. During this time, I have witnessed periods of water degradation and numerous algae blooms. I am concerned with the water quality in Keauhou Bay and feel the water will only be further degraded with the addition of a resort.</p>	<p>Linda Churches</p>	<p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
<p>Further, guests at the Bungalow Resort will bring their increased activities to the Bay causing distress to the marine life which is revered and respected by locals who use this Bay. Guests don't have a vested interested in the environment at the Bay as do locals who live here. Even with education programs for visitors, the Resort itself will increase distress to the ocean and land due to more usage. Increased vehicles will also add to more pollution in this area. Construction activity and noise will further disturb marine life.</p>	<p>Nancy Vidana</p>	<p>The KBMP is intended to enhance shoreline access to Keauhou Bay, providing users with improved entry to public recreational areas and the ocean. While Kamehameha Schools does not have jurisdiction over the enforcement of marine wildlife interaction regulation, it may contribute to ocean conservation through educational initiatives and strategically placed signage.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay’s water quality.</p>
<p>The second example in the DEIS attests to a degraded environment in Ho’okuku Pond (KBMP Section 4.6). The report cites deep organic sediments and dense filamentous algae mats and includes photodocumentation of such (Figure 4-32). These characteristics suggest that runoff carries at least sediment from upland towards the shore (albeit perhaps from a small subwatershed). Surface runoff may also carry excessive nutrients, as evidenced by the algae mats, though the source of nutrients may be the cited “good connection to the basal aquifer and a subterranean pathway to the marine environment” (see also Figure 4-31). Finally, the suggestion that Ho’okuku Pond might be affected by harmful bacteria suggest that Keauhou Bay is at least at risk of such contamination. There is no documentation suggesting that the sedimentation or excessive nutrients (or potentially pathogenic bacteria) are limited to Ho’okuku Pond, and the condition of Ka’ili’ilinehe Beach suggests sedimentation impacts are more widespread. Furthermore, sediment and nutrients are well known examples of development-related impacts to marine environments generally, and corals specifically (for nutrients see Silber et al. 2018 and DiAngelo &amp; Wiedenmann 2014; for sedimentation see Rogers 1990 and Tuttle &amp; Donahue 2022). The DEIS assesses potential impacts of sedimentation by asserting that infiltration is adequate in general, and “strategies...will be implemented.” However, there is no comparison between the current impervious</p>	Nicholas Buhbe	<p>The EIS notes that the 2020 State of Hawai’i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>A significant number of non-Kamehameha Schools properties in the vicinity of Keauhou Bay remain on cesspool systems. The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p> <p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>surface coverage and that proposed, and as such there is no data presented on which to develop an appropriate level of mitigation. Current conditions at Ho'okuku Pond document that infiltration has been insufficient at a lower degree of development than that proposed, and no evidence is provided which documents that existing runoff is safely accommodated in uplands or by Keauhou Bay. Furthermore, while infiltration may be a good strategy to prevent sedimentation (if low impact development practices are implemented and maintained), the hydrological connectivity of the site produces a potential nutrient, bacteria, and contaminant transport pathway from the Project development area to the shoreline. The reduction in vegetative cover and replacement of those areas with hardscape or irrigated/horticulturally maintained areas promote such transport and may increase exposure of and effects on downgradient marine environmental resources. Such sensitive resources, considering their innate and cultural value, deserve at least as much attention as the assessment of flora and avian species in Section 4.6.</p>		<p>systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p> <p>The existing Project Area lacks active management and does not contain infrastructure to capture or treat stormwater, resulting in untreated runoff that may flow toward the ocean. With implementation of the Project, drainage improvements and best management practices will be introduced to capture and treat runoff on site. These measures will reduce the potential for stormwater-related impacts, improving current conditions.</p> <p>The Project will be constructed entirely on land and does not include any direct discharges to coastal waters. As a result, water</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		quality conditions in Keauhou Bay are not expected to worsen and may improve through reduced sediment and pollutant loading.
<p>"The following comments pertain specifically to water quality issues affecting Keauhou Bay. The draft EIS does not address these nor accounts for the fact that the State and the EPA list Keauhou Bay as an Impaired Water Body under section 303 D of the Clean Water Act (CWA). 3 That law requires that impacts to the Bay be mitigated and that further impairment does not occur. This requirement under the law has not been met." Please reject Kamehameha Schools EIS because Keauhou Bay is listed as Impaired under the Environmental Protection Act for Clean Water and this development will add more pollution into the bay. "The Clean Water Act (CWA) is the primary Federal statute regulating the protection of the nation's water. The CWA aims to prevent, reduce, and eliminate pollution in the nation's water in order to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters", as described in CWA section 101(a). A stated goal of the CWA is to eliminate discharge of pollutants into navigable waters, as that term is defined in CWA § 502(7) and corresponding case law." I have attached a screenshot of Keauhou Bay on the EPA Impaired water list and here is the link for Keauhou Bay (Kona) Assessment Unit ID: HI713293 <a href="https://mywaterway.epa.gov/waterbody-report/21HI/HI713293/2020">https://mywaterway.epa.gov/waterbody-report/21HI/HI713293/2020</a> The goal of the Clean Water Act (CWA) is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (33 U.S.C §1251(a)) and Kamehameha Schools Bungalow Resort will devastate the entire ecosystem in Keauhou Bay.</p>	<p>Rebecca Melendez</p>	<p>The EIS notes that the 2020 State of Hawai'i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>A significant number of non-Kamehameha Schools properties in the vicinity of Keauhou Bay remain on cesspool systems. The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p> <p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p> <p>The existing Project Area lacks active management and does not contain infrastructure to capture or treat stormwater, resulting in untreated runoff that may flow toward the ocean. With implementation of the Project, drainage improvements and best management practices will be introduced to capture and treat runoff on site. These measures will reduce the potential for stormwater-related impacts, improving current conditions.</p> <p>The Project will be constructed entirely on land and does not include any direct discharges to coastal waters. As a result, water quality conditions in Keauhou Bay are not expected to worsen and may improve through reduced sediment and pollutant loading.</p>
<p>The draft EIS does not address these nor accounts for the fact that the State and the EPA list Keauhou Bay as an Impaired Water Body under section 303 D of the Clean Water Act (CWA). That law requires that impacts to the Bay be mitigated and that further impairment does not occur.</p>	<p>Rebecca Melendez</p>	<p>The EIS notes that the 2020 State of Hawai'i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>This requirement under the law has not been met. Any development in the watershed needs to be conducted by a careful evaluation of this fact. Under the law, remediation begins by conducting a Total, Maximum Daily Loading study known as a TMDL. The Bay is listed as impaired for exceeding the limits for turbidity. Turbidity has several causes in near-shore waters, such as runoff water with fine sediments and phytoplankton. Our research shows that turbidity is a problem in Keauhou Bay in the absence of surf events. The turbidity is also due to the overgrowth of marine phytoplankton. Our studies show that turbidity declines along a line moving offshore. The inner Bay has very poor circulation and is where most sediments and other factors causing turbidity arise. Phytoplankton grow in response to increased temperature and nutrient loading in the Bay. The lack of adequate circulation amplifies the problem.</p> <p>The nine-month summary chart above shows that turbidity is worse at the shoreline and decreases non-linearly in waters offshore. The slight rise in turbidity at 250 meters may be more of a phytoplankton effect than sediment. The DEIS makes the following statement regarding groundwater. Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project In this area, surface runoff generally does not occur in the typical rainfall occurrence. Runoff either percolates into the underlying groundwater or evaporates into the atmosphere. There are no drainage reports or calculations on file with the County of Hawai'i or DOT for the adjacent public roadways or surrounding developed properties. However, existing stormwater runoff peak flow estimates for the three (3) drainage basis within the Project Area are presented in Table 4-4. The draft EIS fails to account for surface water runoff from Kamehameha III Road. At the Bayside terminus of the road is a dry well. It is typically loaded with sediment and unable to handle the storm flows that come down the length of the road. Thereafter, water overflows the curb and goes down the driveways and the slope into the Bay. As it does, it</p>		<p>land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>A significant number of non-Kamehameha Schools properties in the vicinity of Keauhou Bay remain on cesspool systems. The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p> <p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>picks up considerable sediment and delivers it to the near-shore waters, increasing the turbidity problem (Fig 3). 3 Figure 2. Rain catchment area and water volume estimate. (Bennett 2002) As calculated above, a one-inch rain can produce over five hundred thousand gallons of water, with most of the flow eroding fine sediments as it enters the Bay (Figure 3). The County of Hawai'i was made aware of this dry well failure four years ago. Some of this water comes off of Kamehameha Schools land. The DEIS statement that rainwater percolates to groundwater suggests groundwater is the terminus and the water does not flow to the sea. For at least 25 years, it was the position of the State that groundwater under the land does not communicate with the sea. Considerable research, such as Knee (2010), Dulai (2020), Peterson (2009), and others, shows that the State's policy is specious and not science-based. The State's anchialine system is a subterranean estuary (Bishop 2015). Consequently, the DEIS must reconsider the implication that the local groundwater is an inconsequential endpoint for fresh and waste water flows. A recent US Supreme Court decision held that wastewater disposal to the nearshore groundwater without the necessary permit was a violation of the CWA (see footnote page 7). 4 Figure 3. Stormwater and sediment Flow into the Bay. The photos suggest considerable sediment erosion into the Bay. Nutrient Degradation and Impairment of the Bay. The draft EIS does not account for the elevated levels of nutrients in the Bay. Again, our research shows that nitrogen and phosphorus exceed state standards. Unlike other locations, it is unfortunate that the Hawai'i Department of Health fails to measure these nutrients in the Bay. Thus, conducting a nutrient analysis of the Bay waters was necessary. That analysis is provided below. 5 Table 1. Nutrient analysis along transects over three quarters of 2019 Note: The NELHA Lab has multiple certifications, including the State Department of Health None of the nutrient values for water collected as shown above met state standards. The elevated nutrients in</p>		<p>construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p> <p>It is important to note that Kamehameha Schools does not own or maintain Kamehameha III Road or Kaleiopapa Road. Both roadways are under the jurisdiction of the County of Hawai'i, which is responsible for their upkeep, including any upgrades or modifications to pavement, drainage systems, or related infrastructure. Kamehameha Schools does not have the authority to implement improvements within the public right-of-way or make changes to stormwater systems located within these County-owned corridors. However, implementation of the Project will not increase stormwater runoff to these roads. The existing Project Area is unmanaged and lacks stormwater infrastructure, leading to uncontrolled runoff that may flow toward Kamehameha III Road, occasionally pooling in the cul-de-sac and contributing to overflow toward the ocean. With Project implementation, on-site drainage improvements and best management practices will be incorporated to capture, retain, and treat stormwater within the Project Area, thereby reducing uncontrolled flow onto Kamehameha III Road.</p> <p>Similarly, the existing boat ramp and washdown facilities are owned and managed by the State of Hawai'i. As such, Kamehameha School's has no jurisdiction or authority to regulate practices occurring at these facilities.</p> <p>The existing Project Area lacks active management and does not contain infrastructure to capture or treat stormwater, resulting in untreated runoff that may flow toward the ocean. With</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>the Keauhou Bay watershed come from various sources. A common misconception is that fertilizers applied to private properties and the local golf course are the significant sources. However, research shows that nutrient leaching from the Mauna Kea and Keauhou golf courses is minor compared to the nearby homes on Puako Drive (Dialer 2011). The likely source is the myriad cesspools in the watershed. Some homes on the North peninsula of the Bay are connected to sewers, but most homes are not. The elevated levels of ammonia suggest a water connection to fresh sources of animal and human waste. Ammonia in marine water is quickly converted to nitrate. Our data also shows the nitrogen and phosphorus levels exceed state standards for the Bay. Had the State collected this data, the EPA would declare water Impairment from these nutrients. These elevated nutrients can cause the seasonal "greening" of the marine waters (Smith 2020). The draft EIS makes no mention of nutrient pollution issues and implies that all new developments will be connected to the sewer line that transmits raw sewage to the Heeia wastewater treatment plant. The treated wastewater containing most of the nutrients in human waste is conveyed to the golf course to irrigate the golf course. It is not known the extent to which those nutrients leech into the groundwater and the Bay. It is also not known how much more water the golf course will utilize in the future. Several residences and perhaps some commercial facilities in the proposed development area use cesspools or septic systems for human waste management. The impact on the Bay is significant and needs to be described and mitigated. However, this problem is not mentioned in 6 the DEIS. It is more than advisable that the Project connect all waste systems to the regional sewer. It is well established that sewer lines leak, which is a function of many factors such as piping class and age (Rutch 2006). In the project area, some sewer lines are quite old. One such line on the East shore of the Bay broke during a significant tidal event. The DEIS does not account for sewer line</p>		<p>implementation of the Project, drainage improvements and best management practices will be introduced to capture and treat runoff on site. These measures will reduce the potential for stormwater-related impacts, improving current conditions.</p> <p>The Project will be constructed entirely on land and does not include any direct discharges to coastal waters. As a result, water quality conditions in Keauhou Bay are not expected to worsen and may improve through reduced sediment and pollutant loading.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>leakage or the risk from extreme tidal events. This problem needs to be evaluated, and where sewer lines are at risk and need to be replaced by resilient lines such as High-Density Polyethylene (HDPE). Figure 4. Nitrogen (delta N 15) signatures along the Keauhou Region shoreline (Dailer 2011) Nitrogen Signatures in the Keauhou Area The magnitude of the delta N 15 value indicates the greater contribution of human (animal) waste nitrogen. Raw sewage water is currently conveyed from the hotel at the Bay to the Heeia Wastewater Treatment Plant (HWWTP). The Secondly treated wastewater (WW) is provided to the local golf course for irrigation. How much water the golf course needs or could utilize is unknown. Casual observation of the course suggests that it is under-irrigated. Nutrients in the WW are not removed but beneficial to the grass. Delta N 15 data indicates that the golf course contributes negligible human (animal) nitrogen to the near-shore waters. In contrast, the Delta N 15 values are higher in the Bay proper. The source is likely human waste from cesspools in the immediate region. Less than half of the homes are connected to sewer. It is imperative that the DEIS account for these sources and provide sewer design criteria for all new developments to be connected to the HWWTP. 7 Figure 5. Non-permitted wastewater discharge to the Bay Some years ago, federal funds were provided to upgrade the Bay boat launch facilities. Before the upgrade, boat wash water flowed over the surface and into the Bay. A dry well was installed, and it drained to surface water only a few feet below the drain. Boat wash water is potable water. The wash water contains fish liquids, blood, and particulate fish waste. This wastewater may be a source of ammonia in the Bay. Washed bilge water often contains oil products. The data in Figure 5 is from the wash water surface drain at Honokohau Harbor. Since it is obvious this wash water flows into the Bay in the groundwater, the State should have applied for an NPDES permit. Such a permit is required for any ocean discharge of wastewater, especially in waters known to be</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Impaired under the CWA. This requirement has been affirmed by the Supreme Court<sup>1</sup>. Conclusions The surface water and groundwater flows from the proposed development and those in the upper watershed need to be considered to ensure that further degradation of this impaired water body does not occur. This is referred to herein as a TMDL. Given the environmental ethics of Kamehameha Schools and the legal history of the Public Trust Doctrine of the State Constitution<sup>2</sup>, we suggest that these environmental impacts described above be studied for the project design and mitigated. <sup>1</sup> County of Maui, Hawaii v. Hawaii Wildlife Fund, 140 S. Ct. 1462, 590 U.S. 165, 206 L. Ed. 2d 640 (2020). <sup>2</sup> Kelly v. 1250 Oceanside Partners, 140 P.3d 985, 111 Haw. 205 (2006). <sup>8</sup> Keauhou Bay is a small bay inlet on Hawai'i Island and, as such, is subject to much more degradation than the open shore area of West Hawai'i. As such, the Bay requires special protections. Sincerely, /s R.H. Bennett MS, PhD, Presiden</p>		
<p>To whom it may concern an occasional visitor, No to the proposed development. Building always pollutes sensitive water areas. Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a serious negative impact in Keauhou Bay. Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after. Developments have ALWAYS polluted the water in every nearby coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment</p>	Sharon Vollmuth	<p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff." The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," shares that the golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. This pollution and more are being held off from running into the Bay by the very trees you want to take down. Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endanger these species. This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced. My friends and associates have written a good letter, so I am replicating it.</p>		<p>will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p>
<p>Pleaes reject Kamehameha Schools EIS because Keauhou Bay is declared Impaired water HI713293 by the EPA Clean Water Act. This bay needs to be preserved because it is a natural resource that is very sensitve.</p> <p>"The State of Hawaii Conservation District is a designated land area managed by the Department of Land and Natural Resources (DLNR) through the Office of Conservation and Coastal Lands (OCCL). This district was established to protect Hawaii's natural resources and encompasses various land types including watersheds, scenic areas, parklands, wilderness areas, beach reserves, and habitats for endemic plants and wildlife. The Conservation District also includes submerged lands makai of the shoreline."  <a href="https://dlnr.hawaii.gov/occl/conservation-district/">https://dlnr.hawaii.gov/occl/conservation-district/</a></p> <p>Keauhou Bay is a natural resource and NEEDS TO BE PROTECTED. Under the EPA Clean Water Act it is Impaired water area and DLNR it should be conserved because it is</p>	<p>Rebecca Melendez</p>	<p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>an extremely sensitive area. The district is divided into five subzones:</p> <p>Protective: The most environmentally sensitive areas.                      Limited: Areas with some environmental sensitivity.                      Resource: Areas designated for resource conservation.                      General: The least environmentally sensitive areas. Special: Areas with unique land uses</p>		
<p>Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after. Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff."</p>	Adele Henkel	<p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
<p>It is my understanding that the purpose of an EIS is to conduct sufficient research and studies to inform the public of existing conditions in a Project area and provide assessments of Project impacts to the public and regulatory agencies. As part of this assessment, mitigation measures should be considered to reduce Project impacts. In this instance, it does not appear that adequate review of existing data from Keauhou Bay has been undertaken despite evidence of sedimentation, excessive nutrients, and potential bacteria issues. Additional work is necessary to assess existing conditions and analyze the potential impacts from the Project. An adequate assessment of mitigation measures is also necessary not only to complete the DEIS,</p>	Nicholas Buhbe	<p>The EIS notes that the 2020 State of Hawai'i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>A significant number of non-Kamehameha Schools properties in the vicinity of Keauhou Bay remain on cesspool systems. The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure,</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>but also to appropriately inform the public and regulatory agencies of the Project impacts.</p> <p>Development is, in my experience, a one-way path which cannot easily be undone. Keauhou Bay is an important and unique resource on many levels. Managing shoreline development needs to be undertaken with great care now to ensure that resources are better protected for future generations, and not degraded further.</p>		<p>allowing for proper treatment and reducing the potential for pollutants to reach the ocean. Further study will be needed to determine if any capital improvements of the He'eia Waste Water Reclamation Facility WWRF or facilities leading up to it will require improvements with the KBMP's projected increase in flow. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p> <p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
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<p>We conducted numerous water quality studies for years in Keauhou Bay which revealed the extensive, ongoing degradation of the bay environment in the last 25 years. The bottom of the Kamehameha III cul-de-sac continuously floods and pollutes the dry well for the roadway for days after every rainstorm. The fish and crustaceans have declined, the ocean mammals do not visit as often, and frequent human swimmers are blessed with staph and even more serious infections.</p>	<p>Bill and Cindy Armer</p>	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
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Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop this "bungalow resort" project. Research has shown that developments pollute nearby waters constantly during development and after.</p>	<p>Donna Dufault</p>	<p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
<p>The draft EIS does not address these nor accounts for the fact that the State and the EPA list Keauhou Bay as an Impaired Water Body under section 303 D of the Clean Water Act (CWA). That law requires that impacts to the Bay be mitigated and that further impairment does not occur. This requirement under the law has not been met. Any development in the watershed needs to be conducted by a careful evaluation of this fact. Under the law, remediation begins by conducting a Total, Maximum Daily Loading study known as a TMDL.</p>	<p>Sylvie Madison</p>	<p>The EIS notes that the 2020 State of Hawai'i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>A significant number of non-Kamehameha Schools properties in the vicinity of Keauhou Bay remain on cesspool systems. The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean. Further study will be needed to determine if any capital improvements of the He'eia Waste Water Reclamation Facility WWRF or facilities leading up to it will require improvements with the KBMP's projected increase in flow. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
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Comments	Commenter	Responses
		<p>The existing Project Area lacks active management and does not contain infrastructure to capture or treat stormwater, resulting in untreated runoff that may flow toward the ocean. With implementation of the Project, drainage improvements and best management practices will be introduced to capture and treat runoff on site. These measures will reduce the potential for stormwater-related impacts, improving current conditions.</p> <p>The Project will be constructed entirely on land and does not include any direct discharges to coastal waters. As a result, water quality conditions in Keauhou Bay are not expected to worsen and may improve through reduced sediment and pollutant loading.</p>
<p>Keauhou Bay and the nearshore waters are too small and fragile to support more development.</p> <p>Keauhou Bay needs the protection and support of the existing natural filtering system between the golf course and the beach.</p> <p>The bungalow development imposes a significant environmental impact, paving over this natural filtering system, by adding additional hardscape.</p>	<p>Marcie Ide</p>	<p>Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project Area, surface runoff generally does not occur in the typical rainfall occurrence. As a result, the Project Area does not contain any visible natural gulches or waterways. Runoff typically either percolates into the underlying groundwater or evaporates into the atmosphere.</p> <p>Kamehameha Schools acknowledges the potential for runoff from the golf course located mauka of the Project Area (not owned by Kamehameha Schools) during heavy rain events. Fertilizers and other nutrient pollutants can be harmful to coastal marine environments by promoting algae growth, which can disrupt marine ecosystems.</p> <p>Currently, the portion of the Project Area between 'Ahu'ula cliff and the golf course is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or erosion control benefits. The Project does not propose the removal of native forests.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p>
<p>Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop this "bungalow resort" project. Research has shown that developments pollute nearby waters constantly during development and after. Developments have ALWAYS polluted the water in every near-coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called 'nonpoint source pollution', which occurs as a result of runoff." According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," the golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use</p>	<p>Kano Leohano</p>	<p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
by the EPA due to developmental hazards. These pollutions and more are being held off from running into the Bay by the trees that would be destroyed and removed if this project were to be allowed.		
<p>Please see that developing Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would happen a lot more often due to taking out the natural pollution filter, that is the trees and the land that is there now. These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely because of the bungalow resort development's pavement. As of right now the trees and land that this development wants to clear and develop into a bungalow resort is a Natural Pollution Filter. It's the pavement that this development wants to put in that will cause a lot of pollution to runoff into Keauhou Bay because this top land that is directly below the golf course (that they want to clear) soaks in the golf course pesticides, fertilizer, weed killer... and is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pollution. These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay hence, for these endangered species habitat. Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME a CONSERVATION AREA for these endangered species because it is their habitat as of today, and to allow a resort development to be built above this bay would threaten the very lives of these endangered species because it will allow golf course toxic pollution and development pollution to run into these species natural habitat, which is Keauhou Bay. Keauhou Bay has trees and land just under the golf course (that Kamehameha Schools wants to clear for their bungalow resort) that protects Keauhou Bay from a lot of algae blooms because it soaks up pollution that is runoff from fertizler, weed killer... in the golf</p>	<p>Donald                      Robert Berger                      Stephen Goudreau                      Sara Irwin Goudreau                      Lucia Kaplan                      Rebecca Melendez                      Roslyn Patrick-Sunnes                      Deborah Sevy                      Mayari Sherina Ong                      Lisa Thatcher                      Rayann Ebreo                      Riley Reynolds                      Sharron Rudolph                      Curt and Ellen Winningham</p>	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project Area, surface runoff generally does not occur in the typical rainfall occurrence. As a result, the Project Area does not contain any visible natural gulches or waterways. Runoff typically either percolates into the underlying groundwater or evaporates into the atmosphere.</p> <p>Kamehameha Schools acknowledges the potential for runoff from the golf course (not owned by Kamehameha Schools) located mauka of the Project Area during heavy rain events. Fertilizers and other nutrient pollutants can be harmful to coastal marine environments by promoting algae growth, which can disrupt marine ecosystems.</p> <p>Currently, the portion of the Project Area between 'Ahu'ula cliff and the golf course is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or erosion control</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>course, and unfortunately when there is a severely heavy rain storm the land up on top of the bay has a greater runoff than normal from the golf course pollution, and pollution foam and alga blooms happen because of it.</p> <p>If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING KEAUHOU BAY'S ECOSYSTEM because the golf course runoff won't have the best protection which is the natural trees and land that can soak up the polluted water most of the year and polluted foam algae blooms will happen a lot more often. Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement? This needs to be fully known because you will be changing an entire ecosystem to build a bungalow resort. Because it rains in Keauhou Bay many nights out of the year and the land they want to clear absorbs the golf course toxins so this bay is not as severely polluted as it will be with pavement and development, and when serious storms come Keauhou Bay won't stand a chance because the land can't keep ALL golf course pollutions out during this time and pavement won't even come close. If you clear this land, this kind of algae bloom will happen a lot more often and end up killing a lot of coral and marine life as stated in the many articles that will follow. One of these articles is in the Global Coral Reef Alliance. They researched the reef before and after a golf course development, and even though this development is not a golf course development, it is still a development and it will also be located just under a golf course and this will allow the pollution from the golf course to come down to the bay a lot more often because the natural land that soaks up this pollution will be gone. Has this EIS done any kind of research about the alga blooms that happen after a serious storm because of the golf course runoff pollution?</p>		<p>benefits. The Project does not propose the removal of native forests.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p>
<p>There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building</p>	David Hill	EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>phase of this enormous project. GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS. These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable! The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat. Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem. Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution? If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM. Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement? This needs to be fully assessed because you will be changing an entire ecosystem</p>	<p>Kaleihua Kamaka                      Kellie Kilcuo                      William Lim                      Jenni Lund                      Rebecca Melendez                      Alicia Morrier                      Belinda Pate                      Jo Quinn                      Jason Rigmaiden                      Bryn Stites                      Wim Verkaok                      Jyn Watson                      Celia Murry                      Maebrie Bettinardi</p>	<p>conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project Area, surface runoff generally does not occur in the typical rainfall occurrence. As a result, the Project Area does not contain any visible natural gulches or waterways. Runoff typically either percolates into the underlying groundwater or evaporates into the atmosphere.</p> <p>Kamehameha Schools acknowledges the potential for runoff from the golf course (not owned by Kamehameha Schools) located mauka of the Project Area during heavy rain events. Fertilizers and other nutrient pollutants can be harmful to coastal marine environments by promoting algae growth, which can disrupt marine ecosystems.</p> <p>Currently, the portion of the Project Area between 'Ahu'ula cliff and the golf course is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or erosion control benefits. The Project does not propose the removal of native forests.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.</p>		<p>stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p>
<p>Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after. Developments have ALWAYS polluted the water in every near coastal development area. The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. These pollutions and more are being held off from running into the Bay by the very trees you want to take down. Let's not forget the marine life that will be threatened by excess pollution and traffic.</p>	<p>Danica Ann Barretto                      Susie Jenkins                      Nawahine Kahoopii                      Veronique Leferink                      Ellen Manko                      Heather Masunaga                      Jasmin McCracken                      Michelle Melendez</p>	<p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
	Koohan Paik-Mander Alexis Russel Umberto Taormina Lisa Thatcher Sandra Vacchio Riley Reynolds Sharron Rudolph Curt and Ellen Winningham	
This problem is compounded by runoff after it rains. The drainage maps in the DEIS show it all flows toward the bay. Some is surface runoff and much is runoff just below the surface and it is particularly significant after a heavy rain. After very heavy rains the bay occasionally turns green from algae blooms creating very unhealthy conditions for users of the bay. Added development will add stress to this bay and may reverse its health permanently. The State Clean Water Branch does occasional monitoring of the bay waters and shows average bacteria counts are rising over the years.	Kathleen McMillen	EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.  Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project Area, surface runoff generally does not occur in the typical rainfall occurrence. As a result, the Project Area does not contain any visible natural gulches or waterways. Runoff typically either percolates into the underlying groundwater or evaporates into the atmosphere.  To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas,

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p>
Keauhou Bay receives an inordinate amount of pollution from runoff, especially after rain. Clearing land and paving more roads will remove the natural filter that cleans some of the water.	Joyce Barbarich	<p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Dear County of Hawai'i Planning, Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Shoals to develop their bungalow project, because it is proven that developments will ALWAYS have rain runoff that will pollute the bay constantly during development and after. "An ecosystem under threat Hawai'i's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff... When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain". Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lake sand oceans serve as sinks for many pollutants. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." If it's being drastically hurt by runoff water, Keauhou Bay waters won't stand a chance if development above the bay is allowed because this bay is very small. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life. Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff. All developments</p>	<p>Rebecca Meledez                      Sarah Dahm                      Melanie Diehl                      Claudia Kane                      Heather Tribolet                      Donna Cherrier</p>	<p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>can't fully stop polluting because of runoff from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris. When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral."</p>		
<p>LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem. This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow... As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life. 7 Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff. Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And</p>	<p>Michael Hanly Keana Dawson</p>	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project Area, surface runoff generally does not occur in the typical rainfall occurrence. As a result, the Project Area does not contain any visible natural gulches or waterways. Runoff typically either percolates into the underlying groundwater or evaporates into the atmosphere.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>much of it starts right in the urban and suburban neighborhoods where we live." If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.</p>		<p>stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p>
<p>Reason #1 It's Been Proven Developments Severely Pollute Nearby Waters</p> <p>Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawai'i. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic Impacts state-wide...</p> <p>This was the third major bleaching episode in Hawai'i over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off). "</p>	<p>Sarah Dahm</p>	<p>The EIS notes that the 2020 State of Hawai'i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>A significant number of non-Kamehameha Schools properties in the vicinity of Keauhou Bay remain on cesspool systems. The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>This article is by the Coral Reef Alliance here in Hawai'i. "An ecosystem under threat Hawai'i's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff...</p> <p>When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive."</p> <p>This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development."</p> <p>This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019...</p> <p>We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawai'i."</p> <p>The Chesapeake Bay has a foundation that is trying to save it due to runoff pollution that was caused by developments, and the Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments,</p>		<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Keauhou Bay waters won't stand a chance if development above the bay is allowed because this bay is very small.</p> <p>This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow...</p> <p>As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.</p> <p>Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.</p> <p>Stormwater runoff pollution threatens Chesapeake Bay and it's rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live."</p> <p>If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay because it is so much smaller than the Chesapeake Bay.</p> <p>Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological</p>		<p>The Project will capture and treat stormwater runoff from the Project Area on-site using a combination of drainage improvements and best management practices, preventing untreated runoff from reaching the ocean.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>function, and cause disease and mortality in sensitive species."</p> <p>Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide."</p> <p>Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.</p> <p>When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral."</p> <p>Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)</p> <p>Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival"</p>		
<p>The plan calls for the development of a new hotel adjacent to the bay. Such construction will certainly come with increased run-off into the bay, damaging corals, fish and other marine life, especially the well-known local manta population.</p>	<p>Jeffery Malison</p>	<p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
Keauhou Bay is at capacity you at the present! The water often is brown after a rain and doesn't allow use by local citizens	Donna Cherrier	The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.
Such construction will certainly come with increased run-off into the bay, damaging corals, fish and other marine life, especially the well-known local manta population.	Jeffrey and Leann Malison	The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.
Most disturbed would be the water quality and negative environmental impact to the wildlife in the bay from runoff.	Myland Hui	The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.
We are already loosing so many battles to save what beautiful ocean coral we have and this will do so much damage. Not to mention all the pollution you will have to spray out to keep this new area up with landscaping and bug control. All that will wash into our ocean.	Jennifer Dant	The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>The Project will comply with all applicable federal, state and County regulations related to the use of herbicides or pesticides that may be used for landscaping or managing invasive vegetation.</p>
<p>Historical Runoff Issues The DEIS does not address how the Project will address manage flooding on Kamehameha II Drive caused by Project lands. The DEIS does not address that there were two sand volleyball courts historically. The second court was located in the publicly owned land between the seawall and existing volleyball court. When the Project proponent cleared lands to construct the existing parking lot and boat storage area, stormwater drainage was considerably affected. As a note, the DEIS fails to address the permit status of the existing boat storage and parking lot. The Project proponent failed to make repairs to the second sand volleyball court and the EIS fails to address what appears to be unpermitted development of the current northern parking lot and boat storage lot, or their environmental impacts. The DEIS does not address the historical catchment area north of the sand volleyball court, which historically helped to capture runoff from the northern area where the new parking lots and boat storage were added. The Project proponent has failed to maintain the catchment, which has caused excess runoff from the area resulting in damage to publicly-owned property. The DEIS needs to address the permit status of the apparently illegally constructed parking and boat parking lots including the lack of environmental review, the historical runoff issues from the Project proponent lands that have damaged publicly owned property, and the strategy to mitigate existing issues.</p> <p>Runoff Impacts from Increased Hardscape The Project fails to address additional runoff impacts from increased hardscape. The Project proposes to remove existing native vegetation in favor of construction of the resort, commercial kiosks, and commercial/retail spaces. According to the</p>	Jennie Shield	<p>Kamehameha Schools does not have an agreement with any entity for use of the volleyball court. The existing and former court are an informal and unapproved use on Kamehameha Schools' property.</p> <p>The KBMP includes improvements to expand and formalize existing boat trailer and parking areas north of the bay. These upgrades will include paving, stall delineation, and lighting, designed to improve both capacity and safety. Kamehameha Schools will obtain all necessary permits and approvals prior to construction.</p> <p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Project maps, it appears that about 15-20 acres of native vegetation will be removed and replaced with mostly hardscape. There is no analysis of the current conditions or of the increased flow and rate of runoff from the increased hardscape. The same conclusion can be drawn here – that the DEIS has failed to provide the appropriate analysis and documentation to support its conclusion</p>		<p>detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p> <p>It is important to note that Kamehameha Schools does not own or maintain Kamehameha III Road or Kaleiopapa Road. Both roadways are under the jurisdiction of the County of Hawai'i, which is responsible for their upkeep, including any upgrades or modifications to pavement, drainage systems, or related infrastructure. Kamehameha Schools does not have the authority to implement improvements within the public right-of-way or make changes to stormwater systems located within these County-owned corridors. However, implementation of the Project will not increase stormwater runoff to these roads. The existing Project Area is unmanaged and lacks stormwater infrastructure, leading to uncontrolled runoff that may flow toward Kamehameha III Road, occasionally pooling in the cul-de-sac and contributing to overflow toward the ocean. With Project implementation, on-site drainage improvements and best management practices will be incorporated to capture, retain, and treat stormwater within the Project Area, thereby reducing uncontrolled flow onto Kamehameha III Road.</p>
<p>The project proposes to remove a large amount of existing historical forest area that may be capturing pollutants from the golf course and preventing them from entering the bay.</p>	<p>Ioana Petrisor</p>	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Moreover, locals have reported that the East end of the bay has gotten noticeably shallower in recent years, suggesting that sedimentation of the bay is occurring. Overall, there appears to be evidence that historical land clearing in the area has led to increased runoff from the Project area. Moreover, the project proposes to remove 10+ acres of heavily forested land and replace it with roads, parking lots, buildings and other hardscape. That forested land receives runoff from the golf course area uphill of the forested area. One would expect forested area to slow down rainfall and reduce runoff the upper portions of the project area and golf course.</p>		<p>measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project Area, surface runoff generally does not occur in the typical rainfall occurrence. As a result, the Project Area does not contain any visible natural gulches or waterways. Runoff typically either percolates into the underlying groundwater or evaporates into the atmosphere.</p> <p>Kamehameha Schools acknowledges the potential for runoff from the golf course (not owned by Kamehameha Schools) located mauka of the Project Area during heavy rain events. Fertilizers and other nutrient pollutants can be harmful to coastal marine environments by promoting algae growth, which can disrupt marine ecosystems.</p> <p>Currently, the portion of the Project Area between 'Ahu'ula cliff and the golf course is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or erosion control benefits. The Project does not propose the removal of native forests.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p>
<p>A study needs to be done to assess existing pollutant loading to the bay from the surrounding properties. This would likely include sampling any runoff to the bay, including from the golf course and runoff from the existing parking lots, as well as core sampling within the bay to assess the level of pollutants within the sediment and to evaluate the historical pollutant loading in the bay that are currently impacting flora and fauna (and water quality) within the bay. Note that while the EIS suggests that rainfall on the project site may percolate in the subsurface rather than running into the bay, it is my understanding (based on discussion with locals) that there is current flooding experienced on nearby Kamehameha III drive during rain events (with part of the flooding potentially originating from Project lands) and in the past rain events have washed out the 2nd volleyball court that was located to the west of the remaining court. It appears that, at least at times, runoff does get into the bay and that should be considered.</p>	<p>Ioana Petrisor</p>	<p>The EIS notes that the 2020 State of Hawai'i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>A significant number of non-Kamehameha Schools properties in the vicinity of Keauhou Bay remain on cesspool systems. The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean. Further study will be needed to determine if any capital improvements of the He'eia Waste Water Reclamation Facility WWRF or facilities leading up to it will require improvements with the KBMP's projected increase in flow. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>As Kailua-Kona receives rainfall from periodic tropical storms and/or remnants of hurricanes where several inches of rain can fall within a couple of days, the project needs to study rainfall from large episodic events and the impact on the bay. In particular, with the forest gone and replaced by roads, parking lots, buildings and other hardscape, that water can no longer percolate and will be added runoff. None of this analysis was apparently conducted. An assessment should then include projections as to the amount of the potential increases in the quantity of pollutants entering the bay from the Project, assess potential mitigation measures and assess the ecological impact from the runoff. In conclusion, the EIS as written fails to include studies necessary to assess historical and ongoing impacts to the bay, future impacts to the bay from the Project, and potential mitigation measures to address historical issues caused by Proponents lands, if any, and future impacts from the proposed Project</p>		<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>The existing Project Area lacks active management and does not contain infrastructure to capture or treat stormwater, resulting in untreated runoff that may flow toward the ocean. With implementation of the Project, drainage improvements and best management practices will be introduced to capture and treat runoff on site. These measures will reduce the potential for stormwater-related impacts, improving current conditions.</p> <p>The Project will be constructed entirely on land and does not include any direct discharges to coastal waters. As a result, water quality conditions in Keauhou Bay are not expected to worsen and may improve through reduced sediment and pollutant loading.</p>
<p>The Report Fails To Address Historical Runoff Issues                  Currently, Kamehameha III Drive experiences flooding after even an average rainstorm. (Personal observations over the last 20 years.) Portions of the flooding appears to originate from Project lands and nothing in the EIS addresses how the Project will address existing flooding on Kamehameha III Drive caused by Project lands. The EIS also fails to address the fact that historically there were two sand volleyball courts. The 2 nd court was situated in the publicly owned land between the seawall and the existing volleyball court. When the project proponent cleared lands (it appears illegally and without an EIS and/or other permit) to construct the existing parking lot and boat storage area the drainage was substantially effected and the rather than have vegetation slow the water flow, the surface flow rate dramatically increased and the 2 nd sand volleyball court was washed out along with portions of the remaining volleyball court. (Personal observation.) Note: The EIS fails to address the permit status of the existing boat storage and parking lots on the northern side of Keauhou Bay and I could not find any permit with the County for the construction nor corresponding environmental documentation. Accordingly, it appears that the boat parking lot and other parking lot may be unpermitted. The Project proponent failed to make repairs to the 2 nd sand volleyball court located on public</p>	<p>Jeff Caufield</p>	<p>Kamehameha Schools does not have an agreement with any entity regarding the use of the existing or former volleyball court. The volleyball courts represent an informal and unapproved use of Kamehameha Schools' property. While residents have enjoyed the privilege of utilizing the courts in the past, Kamehameha Schools has no obligation to maintain, reconstruct, or provide improved facilities for this purpose. Future use and management of the area will be aligned with the goals and strategies outlined in the KBMP.</p> <p>The KBMP includes improvements to expand and formalize existing boat trailer and parking areas north of the bay. These upgrades will include paving, stall delineation, lighting, and drainage designed to improve both capacity and safety.</p> <p>The existing boat trailer parking area was originally constructed in the 1960s, prior to the establishment of the current zoning and permitting frameworks. As such, it is considered a nonconforming use. The SMA permit requirement was established in 1975 with the enactment of Act 176, also known as the Shoreline Protection Act, which created a regulatory process for development within coastal areas.</p> <p>In 2022, Sea Quest Hawai'i, a tenant of Kamehameha Schools, applied for and received SMA Minor permit related to ongoing boat trailer storage operations. The permit was approved on November 16, 2022 (Keauhou Marine Boat Park; TMK (3) 7-8-010:044;</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>lands and existing sand volleyball court that its apparently illegal development destroyed. The EIS fails to address the apparent illegal development of the current northern parking lot and boat storage lot nor the environmental impacts therefrom. Notably, the EIS fails to also address that to the North of the sand volleyball court is a historical catchment area that helped capture runoff from the northern area where the new parking lots and boat storage were added. (Personal observation and interview of locals.) The Project proponent has failed to maintain the catchment, which has contributed to excess runoff from the area that has damaged publicly owned property. In interview of locals, in the past there have been attempts by the locals to keep the catchment clear so as to reduce flooding from the upper areas. The EIS must address the permit status (or lack thereof) of the apparently illegally constructed parking and boat parking lots including the lack of environmental review thereof, the historical runoff issues from the Project proponent lands that have caused damage to publicly owned property and how the project will mitigate existing issues. For this basis alone, the EIS must be rejected and further studies and assessments conducted. 6. The Project Fails To Address Additional Runoff Impacts From Increased Hardscape The project proposes to take existing native vegetation areas and tear them out in favor of building the resort, commercial kiosks and commercial/retail. Based on the review of project maps, it appears that roughly 15-20 acres of native vegetation will be removed and replaced with mostly hardscape. There is NO analysis of the existing runoff from the "as is" condition of the properties and project area. There is also no study/analysis and/or projection of the increase flow and rate of runoff from the increased hardscape. The potential increased flow has the potential to alter the fresh/saltwater balance within the eastern end of the bay, which could impact fish and coral. This is a requirement of the EIS. The failure to include such an analysis mandates that the EIS be rejected and further</p>		<p>County SMA permit: PL-SAA-2022-000101 and PL-SMM-2022-000031). The approved scope included the installation of a new entry gate, security cameras, fencing, signage, and lighting, as well as maintenance of the existing parking lots and removal of overgrown vegetation and one tree located within the parking area.</p> <p>As part of the KBMP, Kamehameha Schools intends to pursue a comprehensive SMA permit to formalize and entitle both existing and proposed uses within the Project Area. This approach will address legacy uses that predate the permitting requirements and provide a regulatory pathway for new improvements consistent with the KBMP.</p> <p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>studies of historical, existing and potential future conditions analyzed with appropriate mitigation measures.</p>		<p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p> <p>It is important to note that Kamehameha Schools does not own or maintain Kamehameha III Road or Kaleiopapa Road. Both roadways are under the jurisdiction of the County of Hawai'i, which is responsible for their upkeep, including any upgrades or modifications to pavement, drainage systems, or related infrastructure. Kamehameha Schools does not have the authority to implement improvements within the public right-of-way or make changes to stormwater systems located within these County-owned corridors. However, implementation of the Project will not increase stormwater runoff to these roads. The existing Project Area is unmanaged and lacks stormwater infrastructure, leading to uncontrolled runoff that may flow toward Kamehameha III Road, occasionally pooling in the cul-de-sac and contributing to overflow toward the ocean. With Project implementation, on-site drainage improvements and best management practices will be incorporated to capture, retain, and treat stormwater within the Project Area, thereby reducing uncontrolled flow onto Kamehameha III Road.</p>
<p>The EIS mentions the value of Keauhou's reef, citing coral cover as high as 62% (which is considerably higher than the statewide average; Rodgers et al. 2015), but maintains that impacts to reefs will be minimal because the development will occur only on land. This is shortsighted, because coral reefs are directly impacted by land-based sources of pollution. Furthermore, the EIS does not propose a convincing plan for dealing with wastewater and stormwater</p>	<p>Orion McCarthy</p>	<p>Section 4.12 of the EIS includes detailed evaluations of the existing infrastructure capacities at Keauhou Bay, such as water, wastewater, solid waste, power, and telecommunications, along with potential impacts, and the necessary upgrades to support the KBMP. Specifically, details concerning Wastewater Treatment and Disposal are discussed in Section 4.12.2.</p> <p>Wastewater generated by the Project will be conveyed through a sewer main along Old Kona Road, which will connect to the existing</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>from the proposed development. The geology of the Big Island is characterized by extremely porous rocks, which allows wastewater and stormwater pumped into dry wells to percolate up onto the reef. This makes Kona’s reef especially susceptible to impacts from coastal runoff and wastewater (Gove et al. 2023). Similar upwelling has negatively impacted coral reefs in nearby Maui from the Lahaina Wastewater Reclamation Facility (Williams et al. 2016).</p>		<p>sewer infrastructure. The wastewater will then be conveyed to the He’eia Wastewater Reclamation Facility (WWRF), where it will be treated. Further study will be needed to determine if any capital improvements of the WWRF and facilities leading to it will be required to accommodate an increase in flow from the Project.</p> <p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p>
<p>As noted below, my overall conclusion is that the EIS lacks many of the basic foundational studies of existing conditions within the bay necessary to assess the potential impacts of the project and also assess potential mitigation measures. In particular, studies are needed of the existing sediments (quality and quantity) within the bay to quantify existing ecological health and credible projections are needed of potential project impacts in order to incorporate appropriate mitigation measures.</p> <p>The Project proposes to remove acres of forest surrounding Keauhou Bay.to construct a resort comprised of 43 homes with 150 bedrooms, build a new road connecting the north and south ends of the bay, build commercial kiosks, construct a cultural center and construct a commercial/retail center on the eastern end of the bay. As</p>	James Wells	<p>The EIS notes that the 2020 State of Hawai’i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>A significant number of non-Kamehameha Schools properties in the vicinity of Keauhou Bay remain on cesspool systems. The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean. Further study will be needed to determine if any capital improvements of the He’eia Waste Water</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>you are aware, coral, fish and other flora and fauna can be particularly susceptible to harm from excess sediment, salinity balances, toxic pollutants and nutrient loading in shallow water bodies like Keauhou Bay. In order to determine what the potential ecological impacts to the bay might be there needs to be a baseline study conducted of the existing sediments within the bay to determine the historical sedimentation rate, quantify the existing pollutant and nutrient loads within those sediments, identify the source(s) of sediments/pollutants/nutrients. In turn, this baseline analysis would contribute to the necessary analysis of potential impacts from the Project, including an analysis of mitigation measures, if any, that might be needed to protect sensitive flora and fauna within the bay, including coral communities. Once the baseline study is conducted the EIS should provide predictions of Project impacts to the bay, including impacts from the removal of the forest, increased hardscape, and increased potential for pollutants and sediment to enter the bay from both construction activities but also new roads and housing. Once the potential impacts are analyzed, mitigation measures should then be assessed and required, if necessary) that could minimize the impact on the bay. Without the foregoing analysis, I do not believe the EIS can meet its obligation of determining the magnitude of potential Project impacts on the ecology, nor identify mitigation measures that could bring the impacts down to an acceptable level, if needed.</p> <p>The purpose of an EIS is to conduct sufficient research and studies to inform decision-makers and the public of potential Project impacts. This clearly requires an understanding of baseline conditions. In this instance, it does not appear that adequate studies have been conducted of the bay to assess existing conditions nor analyze the potential impacts from the Project so as to both assess potential mitigation measures but also inform the public and regulatory agencies of the Project impacts.</p>		<p>Reclamation Facility WWRF or facilities leading up to it will require improvements with the KBMP's projected increase in flow. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p> <p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p> <p>The existing Project Area lacks active management and does not contain infrastructure to capture or treat stormwater, resulting in untreated runoff that may flow toward the ocean. With implementation of the Project, drainage improvements and best management practices will be introduced to capture and treat runoff on site. These measures will reduce the potential for stormwater-related impacts, improving current conditions.</p> <p>The Project will be constructed entirely on land and does not include any direct discharges to coastal waters. As a result, water quality conditions in Keauhou Bay are not expected to worsen and may improve through reduced sediment and pollutant loading.</p>
<p>The DEIS description of “Storm Water Runoff, Drainage” at DEIS 4-81 does not correspond with my observations of these events. When we have heavy rainfall there is significant unregulated draining on the grounds currently used by Keauhou Canoe Club and into Keauhou Bay. Runoff onto the grounds is sufficient to wash gravel down from the Old Kona Road onto the KCC grounds. But more significant is the runoff that flows down Kamehameha Road and pools at the end of the cul-de-sac and then overflows into the bay. The mitigation measures discussed at DEIS 4-86 do not account for this level of runoff, much less its effect on Keauhou Bay. More mitigation measures should be considered.</p>	<p>Joanne (Jody) Wheeler</p>	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p> <p>It is important to note that Kamehameha Schools does not own or maintain Kamehameha III Road or Kaleiopapa Road. Both roadways are under the jurisdiction of the County of Hawai'i, which is responsible for their upkeep, including any upgrades or modifications to pavement, drainage systems, or related infrastructure. Kamehameha Schools does not have the authority to implement improvements within the public right-of-way or make changes to stormwater systems located within these County-owned corridors. However, implementation of the Project will not increase stormwater runoff to these roads. The existing Project Area is unmanaged and lacks stormwater infrastructure, leading to uncontrolled runoff that may flow toward Kamehameha III Road, occasionally pooling in the cul-de-sac and contributing to overflow toward the ocean. With Project implementation, on-site drainage improvements and best management practices will be incorporated to capture, retain, and treat stormwater within the Project Area, thereby reducing uncontrolled flow onto Kamehameha III Road.</p>
<p>I am writing in opposition to the current EIS Draft for Keauhou Bay. I am not opposed to the education center, but I believe that the proposed bungalow resort plan will do untold damage to the landscape and to the ocean below. I have read up on this area, and I believe that the</p>	<p>Jessica Kuzmier</p>	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>undeveloped land is a kind of sink to absorb a great deal of fertilizer and runoff from the golf course. I also have heard how the undeveloped land is a barrier for when there is heavy rain, preventing harmful algae blooms due to heavy rain. Given this, although it is claimed to be 'low impact', any infrastructure leading to the bungalows will only decimate what is right now acting as a barrier to additional damage to the bay.</p>		<p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project Area, surface runoff generally does not occur in the typical rainfall occurrence. As a result, the Project Area does not contain any visible natural gulches or waterways. Runoff typically either percolates into the underlying groundwater or evaporates into the atmosphere.</p> <p>Kamehameha Schools acknowledges the potential for runoff from the golf course (not owned by Kamehameha Schools) located mauka of the Project Area during heavy rain events. Fertilizers and other nutrient pollutants can be harmful to coastal marine environments by promoting algae growth, which can disrupt marine ecosystems.</p> <p>Currently, the portion of the Project Area between 'Ahu'ula cliff and the golf course is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or erosion control benefits. The Project does not propose the removal of native forests.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p>
<p>This will affect our ocean and the area negatively. Golf course run off and damaging of reefs are just a couple of the negative impacts.</p>	<p>Michael Hooser</p>	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p>
<p>Please consider a location where you would not be causing poisonous run off and pollution of a small pristine bay.</p>	<p>Pamela Wang</p>	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p>
<p>The stretch of trees adjacent to the golf course has provided a barrier of protection from runoff of the chemicals from reaching the Bay, this development project would remove this barrier, and with development work overall, there will be harmful runoff into the Bay effecting marine life including our fast-disappearing corals. My daughter attended WHEA and studied coral reefs for many years and she and her friends are greatly concerned to observe our coral reef and ecosystem in dire situation. Please take responsibility...this development will be vastly harmful to all that we love about being here in such a sacred place.</p> <p>I have worked in Keauhou Bay and swam in the waters for 16 years, it is a relatively pristine bay, compared to areas on the island where heavy development has affected the area. I recall at Keauhou swimming with my daughter after an occasion of heavy precipitation causing runoff from the golf courses, we were concerned with the degree of foaming, the algae blooms in the waters. My daughter and I were concerned and confused at the time, but then as we've become more educated we understand that it was because of the golf course polluting, with the trees removed in the furthering of development we will expect these waters to be</p>	Heather Laursen	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project Area, surface runoff generally does not occur in the typical rainfall occurrence. As a result, the Project Area does not contain any visible natural gulches or waterways. Runoff typically either percolates into the underlying groundwater or evaporates into the atmosphere.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
blooming with algae, forming of the waters, and the marine life increasingly suffering.		<p>Kamehameha Schools acknowledges the potential for runoff from the golf course (not owned by Kamehameha Schools) located mauka of the Project Area during heavy rain events. Fertilizers and other nutrient pollutants can be harmful to coastal marine environments by promoting algae growth, which can disrupt marine ecosystems.</p> <p>Currently, the portion of the Project Area between 'Ahu'ula cliff and the golf course is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or erosion control benefits. The Project does not propose the removal of native forests.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Kamehameha School's Bungalow Resort Development will clear land that has been protecting Keauhou Bay from golf course runoff pollution for years, and the development will kill an entire ecosystem.</p> <p>The "Natural Ground Cover has 10% runoff, where as development has 55% runoff..." This was taken from NOAA'S website and it proves the natural land has been soaking up the above golf course pollutions before it runs into the bay for years.</p> <p>"Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development..." This info was taken from Global Coral's website.</p> <p>"Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." This info is from Environmental Evidence Journal website and proves the development will kill coral and marine life.</p>	Alexia Aberee	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project Area, surface runoff generally does not occur in the typical rainfall occurrence. As a result, the Project Area does not contain any visible natural gulches or waterways. Runoff typically either percolates into the underlying groundwater or evaporates into the atmosphere.</p> <p>Kamehameha Schools acknowledges the potential for runoff from the golf course (not owned by Kamehameha Schools) located mauka of the Project Area during heavy rain events. Fertilizers and other nutrient pollutants can be harmful to coastal marine environments by promoting algae growth, which can disrupt marine ecosystems.</p> <p>Currently, the portion of the Project Area between 'Ahu'ula cliff and the golf course is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or erosion control benefits. The Project does not propose the removal of native forests.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p>
<p>Pollution - My tutu always spoke about the pollution and overuse of the bay. I do see that there is a plan to connect current and future facilities to the He'eia sewer system. Also, implementing water runoff solutions to eliminate further pollution of the bay will be imperative.</p>	<p>Leiola Augustine</p>	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas,</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.
<p>I want more intricate details of protection for water run-off. Working in the evening at the bay it was very common to have sudden heavy rains. Keauhou rain belt is 35" a year. The first phase of the project with the sewage system and trailer parking remains a big threat to our bay with coral kill from silt and sediment. The Red Hill 1250 project was very destructive and damaging to our ocean and marine livelihood. Robert Kim directed me as a witness in court against Bud Quitiquit and four mainland lawyers. I remained giving my testimony for over an hour. The court gave me a copy of the testimony that I did daily trips to Red Hill and my underwater experience of damaging changes that I observed. If anyone would like to read what I witnessed during that construction time and the lawyers' questions please contact me to review the unnecessary stress and permanent damage that affected the Red Hill area. A reminder of one inch of rain per acre 27,154 gallons with a weight of 113 tons, not including the grade or slope, no containment walls, water guides or barriers can contain this situation. Plans should be made for construction during dry season along with the daily burden of removing any disrupted soil to another location. Tested soils on all acres are crucial to foresee areas that need extra care and replanting. The 2 primary soils are Waiaha cobble medial silt loam and Waiaha medial silt loam</p>	Jan Brinkman	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project Area, surface runoff generally does not occur in the typical rainfall occurrence. As a result, the Project Area does not contain any visible natural gulches or waterways. Runoff typically either percolates into the underlying groundwater or evaporates into the atmosphere.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p>
<p>The Issue of Turbidity: In his July 24, 2024 Comment Letter, Dr. Bennett states: "The Bay is listed as impaired for exceeding the limits for turbidity. Turbidity has several causes in near-shore waters, such as runoff water with fine sediments and phytoplankton. Our research shows that turbidity is a problem in Keauhou Bay in the absence of surf events. The inner Bay has very poor circulation and is where most sediments and other factors causing turbidity arise. Phytoplankton grow in response to increased temperature and nutrient loading in the Bay. The lack of adequate circulation amplifies the problem." As shown by the photographs in Dr. Bennett's Comment Letter, I have witnessed street runoff spilling over the street curb and pathway at the end of Kamehameha III Road and dumping muddy water from the boat storage facility into the Bay. The federal National Oceanographic and Atmospheric Administration ("NOAA") has listed Keauhou Bay One as a "Marine Protected Area" that is to be "permanently protected year-round" and that such "protection be in perpetuity." In 2014, the federal Environmental Protection Agency ("EPA") concluded that the Bay was "good" for recreational use, but "impaired" due to "turbidity" as it relates to "Fish, Shellfish, And Wildlife Protection and Propagation." Unfortunately, more up-to-date information is</p>	Tamyra Rice	<p>The EIS notes that the 2020 State of Hawai'i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>A significant number of non-Kamehameha Schools properties in the vicinity of Keauhou Bay remain on cesspool systems. The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p> <p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>not available from the EPA. Mitigation measures in the form of proper waste disposal and drainage from the existing boat storage area to the Bay would be appropriate. However, the DEIS does not adequately address this concern.</p>		<p>Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p>
<p>Environmentally this will harm the bay as run off from the golf course above into the bay, after trees are cut down for the project, will impact the harbor. This will leave way for less natural ground cover to protect the flow of runoff chemicals into the harbor. Such chemicals and run off sediment cause harm and death to corals and marine life, including endangered species such as sea turtles and monk</p>	Nancy Vidana	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
seals. Runoff from chemicals also can kill plankton that is the essential food source for Manta Rays who are both beautiful and a source of income for local tour guides.		To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.
Also, if the mission/vision of Kamehameha Schools is to protect/be good stewards of the aina, why expose Keauhou Bay to the potential pollution from groundwater runoff etc?	Theresa Holderread	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p>
Destroying the many acres of forest above the bay and replacing that with urban development, buildings, homes, streets, and parking lots may not be an impact like a nuclear waste dump, but it is a significant alteration of the environment, introducing numerous sources of non-point source pollution affecting not just the bay but the larger coastal environment. This includes toxic pollutants from roads, homes, yards, and businesses. The forest which soaks up much of the heavy rains will be gone, the landscape will be hardened with 248 new parking spaces for	Aaron Chang	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
the resort and new restaurant, as well as commercial and retail activities adjacent to the resort. This assures significant increases in polluted runoff, and much the wildlife that currently lives there and has nowhere else to move thanks to the significant loss of large tracts of undisturbed natural habitat will likely die, or be forced to outcompete other wildlife in the areas where migration occurs.		control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.
Pollution - My tutu always spoke about the pollution and overuse of the bay. I do see that there is a plan to connect current and future facilities to the He'eia sewer system. Also, implementing water runoff solutions to eliminate further pollution of the bay will be imperative.	Kaleiolani Pasciuta	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p>
My concern with the EIS is related to Section 4.5. I swim in the bay each week. We enter at the "beach" which is on the North side of the end of the rock wall, and at the end of Kamehameha III Rd. If there is a heavy rain, which is common for Keauhou, the water there becomes cloudy from the runoff from the water flowing down this road and bringing the dirt and debris. The drainage opening at the end of Kam III in the circular turnaround area becomes backed up and floods the whole end of the road. Mitigating this runoff problem must be in the future plans.	Dorothy Case	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.
I am opposed to the development of Keauhou Bay. Pollution runoff from the new pavement will be devastating to the marine ecosystem. The building process will create pollutants which could subsequently destroy the existing reef.	Pamlea Small	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p>
Removal of Vegetation Buffer: The proposed development plans to remove the last buffer zone of vegetation that protects Keauhou Bay from runoff. This vegetation is essential for filtering pollutants, reducing erosion, and maintaining the bay's water quality. Its removal could lead to increased runoff, pollution, and sedimentation, negatively impacting the marine ecosystem. Recommendation: Retain and enhance the existing vegetation buffer zone by removing the invasive vegetation and restoring a native dryland forest. Profit generated from the new recreation services and restaurant proposed in the project management plan could support the restoration of this native dryland forest and provide conservation jobs and educational opportunities for the youth and residents of Kona. Regular monitoring of water quality should be mandated to ensure that the development of the other project components do not adversely impact the bay.	Alexa Kerver	<p>Mahalo for the recommendation regarding the restoration of the land as a native dryland forest. The economic model presented within the KBMP allows the lands at Keauhou to sustain themselves financially, with income generated through commercial activities directly supporting the protection and preservation of natural and cultural resources, maintenance of access and infrastructure, and the creation of educational and cultural opportunities central to Kamehameha Schools' mission.</p> <p>As part of Kamehameha Schools' long-term land management commitments, invasive plant species within the Project Area will be removed to support the health of the local ecosystem. Native plants appropriate for the Keauhou region will also be planted and maintained. These efforts will be supported by ongoing stewardship and regular groundskeeping to promote ecological resilience and cultural integrity across the landscape.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p>
Perhaps even worse is the proposal to cut down a huge number of trees that protect Keauhou Bay by filtering rain running off the land which often includes golf course chemicals.	Kano Leohano	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p>
Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop this "bungalow resort" project. Research has shown that developments pollute nearby waters constantly during development and	Kano Leohano	It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>after. Developments have ALWAYS polluted the water in every near-coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called 'nonpoint source pollution', which occurs as a result of runoff." According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," the golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are being held off from running into the Bay by the trees that would be destroyed and removed if this project were to be allowed.</p>		<p>practices, as well as responsible construction methods in the short term.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
<p>The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," shares that the golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos— an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are being held off from running into the Bay by the very trees you want to take down.</p>	Adele Henkel	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff." The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," shares that the golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are being held off from running into the Bay by the very trees you want to take down.</p>	<p>Donna Dufault</p>	<p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
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Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
and more are being held off from running into the Bay by the trees that would be destroyed and removed if this project were to be allowed.		
Please reject Kamehameha Schools Bungalow Resort project. Firstly, please, do not risk polluting the water in Keauhou Bay by allowing development. It is a proven fact that developments always pollute nearby waters due to constant runoff (especially during heavy rain or storms). An article by NOAA entitled, What is the biggest source of pollution in the ocean? states "... this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states "Eighty percent of pollution to the 2 marine environment comes from the land. One of the biggest sources is called non-point source pollution which occurs as a result of runoff." Also, cutting the trees down will automatically change this small, yet very important eco-system. This would allow the runoff pollution from the golf course easy access to the Bay. According to the National Library of Medicine, in their article, Putting the Earth in Play: Environmental Awareness and Sports, it says that "the golf industry uses approximately 50 pesticide active ingredients," all of which are toxic and detrimental to near shore waters and their inhabitants.	Marie LeBoeuf	<p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
The tree and natural landscape canopy that lies just mauka of the bay acts like a filter before any runoff from housing and golf course above it reaches the ocean	Yasmin Vatter	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.
<p>The DEIS description of “Storm Water Runoff, Drainage” (DEIS 4.5 at 4-81) does not correspond with KCC’s members’ observations of these events. In any heavy rainfall there is significant unregulated drainage both on the KCC leased grounds and into Keauhou Bay. The runoff onto the grounds is sufficient to wash gravel down from the Old Kona Road onto KCC’s leased lands. More significant is the runoff that flows down Kamehameha III Road and pools in the cul-de-sac—often for days. (Photo #1 below). At times it overflows the cul-de-sac and leaves a sludge in the bay (Photo # 2 below) The mitigation measures discussed at DEIS at 4-85 &amp; 86 do not account for this level of runoff, much less its effect on Keauhou Bay. More effective mitigation measures are needed, and the construction phase of this Project is an ideal time to implement them.</p>	<p>Carolyn Leilani Carter</p>	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project’s detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai’i.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p> <p>It is important to note that Kamehameha Schools does not own or maintain Kamehameha III Road. The roadway is under the jurisdiction of the County of Hawai'i, which is responsible for its upkeep, including any upgrades or modifications to pavement, drainage systems, or related infrastructure. Kamehameha Schools does not have the authority to implement improvements within the public right-of-way or make changes to stormwater systems located within these County-owned corridors. However, implementation of the Project will not increase stormwater runoff to the road. The existing Project Area is unmanaged and lacks stormwater infrastructure, leading to uncontrolled runoff that may flow toward Kamehameha III Road, occasionally pooling in the cul-de-sac and contributing to overflow toward the ocean. With Project implementation, on-site drainage improvements and best management practices will be incorporated to capture, retain, and treat stormwater within the Project Area, thereby reducing uncontrolled flow onto Kamehameha III Road.</p>
<p>A. Erroneous Assumptions 1. "Very Low Rainfall and Runoff" (EISPN 3'16). The EISPN assumes that because rainfall reaches "a maximum average of 35 inches per year" that there is "very low rainfall and runoff" into the bay. This is based on a 2016 NOAA analysis and does not account for any changes in those averages in the last eight years. This must be reconsidered in light of the rapid changes brought on by climate warming. This assumption also appears to be internally inconsistent with other statements in the EISPN. See, notably EISPN 4-4 at Paragraph 11 acknowledging that "Portions of the Project Area are also located within the AE and VE Flood Zones." In my experience, regardless of the historic maximum rainfall average, there are several heavy rains each year that flood across the Old Kona Road onto the adjoining downslope to the bay. The force of the water is sufficient to dig a noticeable trench across the road and into</p>	<p>Rebecca Melendez</p>	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>the downslope to the bay carrying rocks and dirt from the road with it. The flooding also flows down Kamehameha III Hwy sufficient to overflow the curb at the end of the road, dumping silty water directly into Keauhou Bay. The bay water turns brown and is unattractive for swimming 2 following these events. See, photo attached electronically as Exhibit A to this letter. Others are available on request.</p>		<p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p> <p>It is important to note that Kamehameha Schools does not own or maintain Kamehameha III Road or Kaleiopapa Road. Both roadways are under the jurisdiction of the County of Hawai'i, which is responsible for their upkeep, including any upgrades or modifications to pavement, drainage systems, or related infrastructure. Kamehameha Schools does not have the authority to implement improvements within the public right-of-way or make changes to stormwater systems located within these County-owned corridors. However, implementation of the Project will not increase stormwater runoff to these roads. The existing Project Area is unmanaged and lacks stormwater infrastructure, leading to uncontrolled runoff that may flow toward Kamehameha III Road, occasionally pooling in the cul-de-sac and contributing to overflow toward the ocean. With Project implementation, on-site drainage improvements and best management practices will be incorporated to capture, retain, and treat stormwater within the Project Area, thereby reducing uncontrolled flow onto Kamehameha III Road.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<b>Landfills</b>		
<p>1) Hawaii Deals with Burgeoning Waste Management Problem As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020 "Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." 2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity. The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." 3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST "Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled. For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." 4. The future of the landfill The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." 5. Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and</p>	<p>Robert Gay</p>	<p>Section 4.12 of the EIS assesses existing and proposed infrastructure required to support the various Project uses and provide mitigative measures to reduce any adverse effects to the greater Kailua-Kona Region.</p> <p>Section 4.12.3 of the EIS addresses the projected solid waste generated by the implementation of the KBMP. During the construction phase, short-term solid waste will primarily originate from demolition and construction activities. The construction contractor will be required to dispose of all construction-related debris and any hazardous materials at appropriate facilities in compliance with federal, state, and County of Hawai'i regulations.</p> <p>During operations, the KBMP is expected to generate approximately 0.457 tons of solid waste per day. This waste will be handled through the existing County waste management system, with disposal at the West Hawai'i Sanitary Landfill located in Pu'uuanahulu. The volume of waste from the Project is not anticipated to significantly impact the capacity or operations of the County's waste stream.</p> <p>To reduce the volume of waste sent to the landfill, the KBMP includes plans to recycle materials such as food waste, cardboard, glass, and plastics. These recycling efforts will be implemented in coordination with private entities to the extent practical.</p> <p>Section 4.12.1 of the EIS evaluates water supply needs for the KBMP. The Project will connect to existing infrastructure managed by the County Department of Water Supply (DWS). Estimated average water demand is approximately 95,879 gallons per day, based on projected potable and irrigation use.</p> <p>Water conservation measures will be incorporated into Project design and may include efficient irrigation systems such as drip irrigation and moisture sensors, use of non-potable water for irrigation, drought-tolerant landscaping, and ultra-low flow fixtures and toilets. Coordination with the County DWS will continue</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>inner tubes for their trips." 6) Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." 7) A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend." 8) STORY SUMMARY HAWAI'I COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." 9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024 Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." 10) " There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawai'i Department of Health." 11) "Kona coast faces stark wastewater tradeoffs Current situation There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development. 12) "BIG ISLAND NEWS HECO restores power after initiating emergency outages on Big Island An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning 13) The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." 14) Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." 15. Water departments on O'ahu and Hawai'i Island have advised</p>		<p>through the design phase, with final construction plans to be reviewed and approved by DWS and the Hawai'i Fire Department.</p> <p>No significant impacts to the Keauhou aquifer system are anticipated, including when considering cumulative effects from other authorized or planned uses.</p> <p>Section 4.12.2 of the EIS addresses wastewater treatment and disposal. The Project will not utilize cesspools. Wastewater will be collected via a sewer main along Old Kona Road and conveyed through existing infrastructure to the He'eia Wastewater Reclamation Facility for treatment.</p> <p>The anticipated average daily flow rate from the Project is approximately 50,925 gallons per day. Hawai'i Water Service has confirmed available capacity to support the Project. Additional evaluation will be conducted to determine if capital improvements to the WWRF or associated conveyance systems will be necessary to accommodate the projected increase in flow.</p> <p>Section 4.12.4.1 of the EIS evaluates electrical utility requirements for the KBMP. The Project's total electrical demand is estimated at approximately 3,181.86 kVA. The Hawai'i Electric Light Company conducted a preliminary engineering assessment and determined that the Kahu'u substation has sufficient capacity to meet the Project's needs, with no substation upgrades required. However, improvements to HELCO's existing underground distribution system are necessary to support power delivery and have been integrated into the Project's utility design plans.</p> <p>The additional electrical load is not expected to impact existing utility services in the greater Kailua-Kona region. The Project will incorporate energy conservation measures and targets LEED Silver certification. Energy efficiency will be further supported by implementation of EPA Energy Star Program components, including efficient insulation, high-performance windows, compact building design, enhanced ventilation systems, and energy-saving lighting and appliances.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
customers to conserve water ahead of possible storm-related power outages this month.		
<p>Solid Waste Section:</p> <p>Chapters 342H and 342I, HRS, and chapter 11-58.1, HAR, "Solid Waste Management Control" requires the proper management of solid wastes. Generators of solid waste are required to ensure that their wastes are properly delivered to permitted solid waste management facilities. Project managers should require their waste contractors to submit disposal (and recycling) receipts and invoices to ensure proper disposal (or recycling) of wastes.</p> <p>OSWM:</p> <p>Chapter 342G, HRS, encourages the reduction of waste generation, reuse of discarded materials, and the recycling of solid waste. The project developer is highly encouraged to develop a solid waste management plan for each construction project to ensure proper handling of wastes and divert recyclables from being landfilled. Ideally, the plan would seek to maximize waste diversion and minimize disposal. Such plans should include designated areas to promote the collection of reusable and recyclable materials.</p>	Jaz Yamamoto (DOH, Solid & Hazardous Waste Branch) wildlife e	<p>Section 4.12.3 of the EIS addresses the projected solid waste generated by the implementation of the KBMP.</p> <p>Kamehameha Schools acknowledges the applicability of Chapter 342G, Hawai'i Revised Statutes (HRS), which promotes waste reduction, reuse, and recycling. The Project will also comply with Chapters 342H and 342I, HRS, and Hawai'i Administrative Rules Chapter 11-58.1, which govern solid waste management control. These regulations require solid waste generators to deliver waste to permitted facilities for proper disposal. The KBMP will meet all applicable requirements for solid waste management as part of its implementation.</p>
Reason #5 The Big Island Doesn't Have the Resources and Infrastructure for Another Resort Please see the articles below because the Big Island doesn't have the resources or infrastructure to safely add another resort development on island and these other NEWS and Research articles prove this point. 1) Hawaii Deals with Burgeoning Waste Management Problem As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020 "Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being	Donna Cherrier	<p>Section 4.12 of the EIS assesses existing and proposed infrastructure required to support the various Project uses and provide mitigative measures to reduce any adverse effects to the greater Kailua-Kona Region.</p> <p>Section 4.12.3 of the EIS addresses the projected solid waste generated by the implementation of the KBMP. During the construction phase, short-term solid waste will primarily originate from demolition and construction activities. The construction contractor will be required to dispose of all construction-related debris and any hazardous materials at appropriate facilities in compliance with federal, state, and County of Hawai'i regulations.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>recycled.” 2) "Big Island Now readers seem to agree that there’s likely no single solution for slowing down the timeline of the West Hawai’i Sanitary Landfill reaching capacity. The West Hawai’i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." 3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste “Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled. For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona.” 4)“What happens to Hawaii Island’s trash and recyclablesThe future of the landfill The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support.” 5) “The overwhelming plastic waste Hawaii visitors leave behind Hawaii saw more than 9 million visitors last year. Those tourists’ first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips.” 6) “A county commission drafts ordinance aiming to ban recyclables at West Hawai’i landfill Hawai’i County’s Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island’s only working landfill.” 7) ” Hawai’i County issues mandatory 25% water restriction for North Kona A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.” 8) “Hawai’i Water</p>		<p>During operations, the KBMP is expected to generate approximately 0.457 tons of solid waste per day. This waste will be handled through the existing County waste management system, with disposal at the West Hawai’i Sanitary Landfill located in Pu’uanahulu. The volume of waste from the Project is not anticipated to significantly impact the capacity or operations of the County’s waste stream.</p> <p>To reduce the volume of waste sent to the landfill, the KBMP includes plans to recycle materials such as food waste, cardboard, glass, and plastics. These recycling efforts will be implemented in coordination with private entities to the extent practical.</p> <p>Section 4.12.1 of the EIS evaluates water supply needs for the KBMP. The Project will connect to existing infrastructure managed by the County Department of Water Supply (DWS). Estimated average water demand is approximately 95,879 gallons per day, based on projected potable and irrigation use.</p> <p>Water conservation measures will be incorporated into Project design and may include efficient irrigation systems such as drip irrigation and moisture sensors, use of non-potable water for irrigation, drought-tolerant landscaping, and ultra-low flow fixtures and toilets. Coordination with the County DWS will continue through the design phase, with final construction plans to be reviewed and approved by DWS and the Hawai’i Fire Department.</p> <p>No significant impacts to the Keauhou aquifer system are anticipated, including when considering cumulative effects from other authorized or planned uses.</p> <p>Section 4.12.2 of the EIS addresses wastewater treatment and disposal. The Project will not utilize cesspools. Wastewater will be collected via a sewer main along Old Kona Road and conveyed through existing infrastructure to the He’eia Wastewater Reclamation Facility for treatment.</p> <p>The anticipated average daily flow rate from the Project is approximately 50,925 gallons per day. Hawai’i Water Service has confirmed available capacity to support the Project. Additional</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Supply Closely Monitored As Severe Drought Continues Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions.” 9) “Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona.” 10) “Researchers find sewage from an oceanfront Big Island community reaches nearshore waters There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawai’i Department of Health.” 11) “Kona coast faces stark wastewater tradeoffs Current situation There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development. 12) An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30.” 13) Hawai’i State News Update: Hawaiian Electric initiates rolling outages throughout Big Island. The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators.” 14) “LOCAL NEWS HECO issues rolling power outages around Big Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night.” 15) “Here’s how power outages can have repercussions for Hawai’i’s water supply. Water departments on O’ahu and Hawai’i Island have advised customers to conserve water ahead of possible storm-related power outages this month. But what</p>		<p>evaluation will be conducted to determine if capital improvements to the WWRf or associated conveyance systems will be necessary to accommodate the projected increase in flow.</p> <p>Section 4.12.4.1 of the EIS evaluates electrical utility requirements for the KBMP. The Project’s total electrical demand is estimated at approximately 3,181.86 kVA. The Hawai’i Electric Light Company conducted a preliminary engineering assessment and determined that the Kahalu’u substation has sufficient capacity to meet the Project’s needs, with no substation upgrades required. However, improvements to HELCO’s existing underground distribution system are necessary to support power delivery and have been integrated into the Project’s utility design plans.</p> <p>The additional electrical load is not expected to impact existing utility services in the greater Kailua-Kona region. The Project will incorporate energy conservation measures and targets LEED Silver certification. Energy efficiency will be further supported by implementation of EPA Energy Star Program components, including efficient insulation, high-performance windows, compact building design, enhanced ventilation systems, and energy-saving lighting and appliances.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>does the power grid have to do with the water supply? It is impossible to separate Hawai'i's power system from its water system, said Kawika Uyehara, deputy director of Hawai'i County's Department of Water Supply." 16) U.S. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues, one of the most important sayings is ola i ka wai, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "we're in deep trouble." 17) NewsHawai'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HS A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend. 18) Hawai'i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video News With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System. This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island. 20) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand." "News Hawaiian Electric asking Big Island customers to conserve power due to down generators March 25, 2024 · 11:49 AM HST According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues. The plant</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."		
<p>INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort? There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress. Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development? "Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste each year." As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future. 11 Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143- Unit Bungalow Resort Development at Keauhou Bay. On Hawai'i Island, we are already struggling to meet the increasing need for resources and infrastructure. Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill September 17, 2023 The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years. The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish. A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill By Megan Moseley September 6, 2023 Hawai'i County's Environmental</p>	Michael Hanly	<p>Section 4.12 of the EIS assesses existing and proposed infrastructure required to support the various Project uses and provide mitigative measures to reduce any adverse effects to the greater Kailua-Kona Region.</p> <p>Section 4.12.3 of the EIS addresses the projected solid waste generated by the implementation of the KBMP. During the construction phase, short-term solid waste will primarily originate from demolition and construction activities. The construction contractor will be required to dispose of all construction-related debris and any hazardous materials at appropriate facilities in compliance with federal, state, and County of Hawai'i regulations.</p> <p>During operations, the KBMP is expected to generate approximately 0.457 tons of solid waste per day. This waste will be handled through the existing County waste management system, with disposal at the West Hawai'i Sanitary Landfill located in Pu'uuanahulu. The volume of waste from the Project is not anticipated to significantly impact the capacity or operations of the County's waste stream.</p> <p>To reduce the volume of waste sent to the landfill, the KBMP includes plans to recycle materials such as food waste, cardboard, glass, and plastics. These recycling efforts will be implemented in coordination with private entities to the extent practical.</p> <p>Section 4.12.1 of the EIS evaluates water supply needs for the KBMP. The Project will connect to existing infrastructure managed by the County Department of Water Supply (DWS). Estimated average water demand is approximately 95,879 gallons per day, based on projected potable and irrigation use.</p> <p>Water conservation measures will be incorporated into Project design and may include efficient irrigation systems such as drip irrigation and moisture sensors, use of non-potable water for irrigation, drought-tolerant landscaping, and ultra-low flow fixtures and toilets. Coordination with the County DWS will continue</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island’s only working landfill. During a commission meeting on July 26, Ramzi Mansour, Hawai’i County Director of Environmental Management, told commissioners the West Hawai’i Sanitary Landfill only has 20 to 25 years left before it reaches capacity. With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island’s sole dump. Commission chairperson Georjean Adams said it’s a good time to start looking into solutions. Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items – green waste, metals, plastics, paper, paperboard and glass – from ending up in the rubbish dump, located off Queen Ka’ahumanu Highway in Waikōloa. “Trying to site a new landfill is close to impossible,” Adams said. “So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill.” The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to “divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste.” Time’s Up For Landfills ‘Gentle’ demolition strategies can help preserve resources PAULA BENDER April 2, 2024 As Hawai’i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills. Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300</p>		<p>through the design phase, with final construction plans to be reviewed and approved by DWS and the Hawai’i Fire Department.</p> <p>No significant impacts to the Keauhou aquifer system are anticipated, including when considering cumulative effects from other authorized or planned uses.</p> <p>Section 4.12.4.1 of the EIS evaluates electrical utility requirements for the KBMP. The Project’s total electrical demand is estimated at approximately 3,181.86 kVA. The Hawai’i Electric Light Company conducted a preliminary engineering assessment and determined that the Kahalu’u substation has sufficient capacity to meet the Project’s needs, with no substation upgrades required. However, improvements to HELCO’s existing underground distribution system are necessary to support power delivery and have been integrated into the Project’s utility design plans.</p> <p>The additional electrical load is not expected to impact existing utility services in the greater Kailua-Kona region. The Project will incorporate energy conservation measures and targets LEED Silver certification. Energy efficiency will be further supported by implementation of EPA Energy Star Program components, including efficient insulation, high-performance windows, compact building design, enhanced ventilation systems, and energy-saving lighting and appliances.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
feet beyond streams; and 1,000 feet beyond the ocean. New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers. The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary. Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.		
<b>Wastewater</b>		
E. Wastewater. The EISPN briefly describes the existing KS controlled sewage system. (EISPN 3-19 at Paragraph 3.19). It also describes the potential for “Unavoidable and Unresolved Impacts. (EISPN 4-2 at Paragraph 4.6). I will just note that when we paddle canoes past the condos north of the bay we can smell and see evidence of sewage effluent in the ocean. When we paddled south, we now have the benefit of a similar experience offshore from the new million-dollar homes constructed a few years ago. The EIS should take a “hard look” at the effect a 156-unit resort will have on sewage entering Keauhou Bay	Rebecca Melendez	<p>The EIS notes that the 2020 State of Hawai'i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>A significant number of non-Kamehameha Schools properties in the vicinity of Keauhou Bay remain on cesspool systems.</p> <p>The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p>
Wastewater Treatment and Disposal at page 4-142. A wastewater force main passes through the near shore area. The DEIS acknowledges that this area will be affected by sea level rise but does not propose any future action other than	Joanne (Jody) Wheeler	Section 4.12.2 of the EIS addresses wastewater treatment and disposal for the KBMP. Wastewater generated by the Project will be collected via a sewer main along Old Kona Road and conveyed through existing infrastructure to the He'eia Wastewater

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>increasing the amount of sewage that will be flowing through this line. A SLR induced wastewater force main break in this area is not “if it happens...but when it happens”. It will have a devastating impact on the Bay and will severely affect all the tenants and users of the bay. In the recent past the wastewater force main has been exposed by high surf events. This risk should be mitigated (in fact avoided) by relocating the force main to the Old Kona Road</p> <p>Adverse Environmental Effects that Cannot be Avoided page 4-180. This section states “Upon completion of the Project environmental accidents are not anticipated, however if an environmental accident is to occur, DOH will be notified immediately.” When the wastewater force main breaks it will be too late for DOH to do anything to save the bay. The DEIS has acknowledged 3.2 ft of sea level rise. These are predictable adverse effects that can be avoided by moving wastewater force main further from the shoreline. Reconstruction of the Old Kona Road seems like an ideal and cost-effective time to undertake this important mitigation.</p>		<p>Reclamation Facility (WWRF) for treatment. Hawai’i Water Service has confirmed that capacity exists to accommodate the Project's estimated flow.</p> <p>The Project intends to connect to existing infrastructure to limit ground disturbance during construction. Further evaluation will determine whether any capital improvements to the WWRF or conveyance systems are necessary to support increased flow.</p> <p>Kamehameha Schools does not own the wastewater conveyance system, nor the WWRF, and therefore cannot initiate relocation. However, Kamehameha Schools acknowledges the potential impacts of sea level rise on this infrastructure and will collaborate with the County and utilities to explore proactive solutions that enhance long-term system resilience. Kamehameha Schools remains open to cooperating with utility providers should they decide to relocate infrastructure in the future as part of their mitigation strategies.</p>
<p>In regards to your proposed development at Keauhou Bay, I would like to see much more detail on how the additional wastewater, sewage and run-off is going be managed. The bay is very fragile, and it seems that a responsible and caring land owner would do everything possible to keep from damaging such a beautiful and special place.</p>	James Plant	<p>Section 4.12.2 of the EIS addresses wastewater treatment and disposal. Wastewater will be collected via a sewer main along Old Kona Road and conveyed through existing infrastructure to the He’eia Wastewater Reclamation Facility for treatment.</p> <p>The anticipated average daily flow rate from the Project is approximately 50,925 gallons per day. Hawai’i Water Service has confirmed available capacity to support the Project.</p> <p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project’s stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay’s water quality and marine resources both during and after development. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.
<p>The Issue of Nutrient Degradation and Sewer Connections:                      As pointed out in Dr. Bennett’s July 24, 2024 Comment Letter: “The draft EIS makes no mention of nutrient pollution issues and implies that all new developments will be connected to the sewer line that transmits raw sewage to the Heeia wastewater treatment plant. The treated wastewater containing most of the nutrients in human waste is conveyed to the golf course to irrigate the golf course. It is not known the extent to which those nutrients leech into the groundwater and the Bay. It is also not known how much more water the golf course will utilize in the future. Several residences and perhaps some commercial facilities in the proposed development area use cesspools or septic systems for human waste management. The impact on the Bay is significant and needs to be described and mitigated. However, this problem is not mentioned in the DEIS. It is more than advisable that the Project connect all waste systems to the regional sewer. It is well established that sewer lines leak, which is a function of many factors such as piping class and age (Rutch 2006). In the project area, 5 some sewer lines are quite old. One such line on the East shore of the Bay broke during a significant tidal event. The DEIS does not account for sewer line leakage or the risk from extreme tidal events. This problem needs to be evaluated, and where sewer lines are at risk and need to be replaced by resilient lines such as High-Density Polyethylene (HDPE).” Mitigation measures would thus entail an assessment and possible upgrading of the sewer lines currently under the project area. The DEIS does not discuss the possible overloading of the current wastewater discharge or the leeching potential. Mitigation measures would also include a study to ascertain whether the addition of a 150-unit resort and other buildings would overload the current wastewater discharge used to irrigate the nearby golf</p>	Tamyra Rice	<p>The EIS notes that the 2020 State of Hawai‘i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>A significant number of non-Kamehameha Schools properties in the vicinity of Keauhou Bay remain on cesspool systems.</p> <p>The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p> <p>The anticipated average daily flow rate from the Project is approximately 50,925 gallons per day. Hawai‘i Water Service has confirmed available capacity to support the Project. Additional evaluation will be conducted to determine if capital improvements to the County conveyance systems will be necessary to accommodate the projected increase in flow.</p> <p>Kamehameha Schools does not have jurisdiction over the management of wastewater once it is conveyed into the wastewater system. Responsibility for treatment and potential reuse of treated effluent rests with Hawai‘i Water Service. As the utility provider, Hawai‘i Water Service will determine appropriate strategies for wastewater management, including any opportunities for reuse, in accordance with applicable regulatory requirements and operational considerations.</p> <p>Kamehameha Schools does not own the wastewater conveyance system, nor the WWRF, and therefore cannot initiate replacement. However, Kamehameha Schools will collaborate with the County</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
course and whether there is leeching into the groundwater and the Bay.		and to explore proactive solutions that enhance long-term system resilience. Kamehameha Schools remains open to cooperating with utility providers should they decide to replace or relocate infrastructure in the future as part of their mitigation strategies.
<p>The other issue I am very concerned about is how the wastewater is going to be taken care of. Sewage has always leaked into the Bay. For many years one of the members of the Keauhou canoe club, Dennis McHalta, collected samples of the water in the bay very scientifically. There was an OC 16 TV program made about this showing how after a rain, the water becomes turbid. He proved that sewage was leaked as well. My understanding is that there are very old pipes for sewage, water, electric, and telecommunications lines running along the shoreline that are at risk or are already compromised. The first thing that MUST be done before any construction or development is done, is to relocate these lines to a safer place. We already are experiencing higher tides and king tides that tell us the seas are rising. This is an opportunity to correct these issues of water lines, sewer lines, communication lines, to protect the fragile waters of the bay.</p> <p>The proper authorities must be involved to correct these issues. When we first moved to Keauhou in 2011, I remember snorkeling in this bay and seeing beautiful coral of all colors. There were 50-60 manta rays on the night tours. Yellow tang were everywhere. And now when we swim, we do not see any tropical fish or any beautiful coral. And after a rain, the water is cloudy and sometimes smelly. I implore you to take care of the basic needs of the bay first, before going forward on any new development.</p>	Dorothy Case	<p>The EIS notes that the 2020 State of Hawai'i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>A significant number of non-Kamehameha Schools properties in the vicinity of Keauhou Bay remain on cesspool systems.</p> <p>The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p> <p>The anticipated average daily flow rate from the Project is approximately 50,925 gallons per day. Hawai'i Water Service has confirmed available capacity to support the Project. Additional evaluation will be conducted to determine if capital improvements to the County conveyance systems will be necessary to accommodate the projected increase in flow.</p> <p>Kamehameha Schools does not own the wastewater conveyance system, nor the WWRF, and therefore cannot initiate relocation. However, Kamehameha Schools will collaborate with the County and to explore proactive solutions that enhance long-term system resilience. Kamehameha Schools remains open to cooperating with utility providers should they decide to replace or relocate infrastructure in the future as part of their mitigation strategies.</p>
From what I have read, the development is likely to create periodic runoff issues for the ocean and negatively impact	Laurel Terry	EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project's stormwater management

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>the ocean and sea-life, which are already under stress from a warming climate and lack of sufficient sewage treatment which leads to more frequent Brown Water closures. See, e.g., the 3/2024 EPA Region 9 consent order with the County of Hawaii regarding its insufficient sewage facilities, Docket NO. CWA-309(a)-24-003</p>		<p>plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay’s water quality and marine resources both during and after development. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Section 4.12.2 of the EIS addresses wastewater treatment and disposal. The Project will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean.</p>
<p>I would note that as I write this email, there is a 25% water conservation order because 2 of the wells are down. I also know that the County of Hawaii has serious sewage capacity issues. (In addition to the brown water alerts in the past month, and the EPA consent order referenced in my comment letter, I know that many of my friends in Kona who are on septic systems worry about their required conversion and the capacity of the local sewage systems.)</p>	<p>Laurel Terry</p>	<p>Section 4.12 of the EIS assesses existing and proposed infrastructure required to support the various Project uses and provide mitigative measures to reduce any adverse effects to the greater Kailua-Kona Region.</p> <p>Section 4.12.1 of the EIS evaluates water supply needs for the KBMP. The Project will connect to existing infrastructure managed by the County Department of Water Supply (DWS). Estimated average water demand is approximately 95,879 gallons per day, based on projected potable and irrigation use.</p> <p>Water conservation measures will be incorporated into Project design and may include efficient irrigation systems such as drip irrigation and moisture sensors, use of non-potable water for irrigation, drought-tolerant landscaping, and ultra-low flow fixtures and toilets. Coordination with the County DWS will continue through the design phase, with final construction plans to be reviewed and approved by DWS and the Hawai’i Fire Department.</p> <p>No significant impacts to the Keauhou aquifer system are anticipated as a result of the Project, including when considering cumulative effects from other authorized or planned uses.</p> <p>Section 4.12.2 of the EIS addresses wastewater treatment and disposal for the KBMP. Wastewater generated by the Project will be</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		collected via a sewer main along Old Kona Road and conveyed through existing infrastructure to the He'eia Wastewater Reclamation Facility (WWRF) for treatment. Hawai'i Water Service has confirmed that capacity exists to accommodate the Project's estimated flow. Further evaluation will determine whether any capital improvements to the County wastewater conveyance systems are necessary to support increased flow.
<p>Wastewater facility capacity needs updated capacity for 2024 and the improvement analysis is incomplete. The DEIS states, "He'eia WWRF will have capacity to accommodate the increase in wastewater flows based on the information from 2016. Further study will be needed to find out if any capital improvements of the WWRF and facilities leading up to it will need improvements with this increase in flow" (7-12). The DEIS should provide updated pumpage capacity for the He'eia WWRF. Pumpage estimates used for this project are almost a decade old. Furthermore, wastewater analysis should assess whether or not capital improvements are needed before the project plans are accepted. If the project requires capital improvements then those plans should be provided in this DEIS for public review. Capital improvements are major projects that have the potential to cause adverse impact or require further funds that should not be of the taxpayers. I have the following questions: What is the He'eia WWRF pumping capacity as of 2024? Considering current data for the He'eia WWRF can this facility receive the wastewater produced from this site? What are the capital improvement projects needed to ensure that the wastewater can be received by the He'eia WWRF? Can the current sewage line system receive the waste and transfer it to the He'eia WWRF?</p>	Loke Aloua	<p>Section 4.12.2 of the EIS addresses wastewater treatment and disposal for the KBMP. Wastewater generated by the Project will be collected via a sewer main along Old Kona Road and conveyed through existing infrastructure to the He'eia Wastewater Reclamation Facility (WWRF) for treatment.</p> <p>The Hawai'i Water Service Company Inc. is certified by the Hawaii Public Utilities Commission (HPUC) to provide sewer service to the Keauhou area. A sewer service request was submitted for the Project for the estimated wastewater flow projection of 50,925 gallons per day. The Hawai'i Water Service Company Inc. confirmed that the Project will be served. Sewer services will be provided in accordance with the Rules and Regulations and at rates approved by the HPUC.</p> <p>It is expected that the He'eia WWRF will have capacity to accommodate the increase in wastewater flows based on the system capacity information from 2016.</p> <p>Further study is needed to determine the capacity of the individual components of the existing Keauhou sewer system. Hawaii Water Service, as the operator, will review and determine the need for any improvements or expansions to the existing system to ensure adequate capacity and compliance with regulatory requirements. However, this evaluation typically occurs during the County permitting process, when more detailed project designs are submitted for review and approval.</p> <p>Kamehameha Schools remains open to cooperating with utility providers should they decide to replace or relocate infrastructure in the future as part of their mitigation strategies.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>I am no expert, but I can see that the Kona Coast is already overpopulated, and we are befouling our nest. Kahalu'u Bay is already being polluted by leakage from nearby cesspools since the sewer line only extends as far as the EPA mandate; I have not heard that the Keauhou development project involves an extension of that sewer. In any case, runoff from the acres of pavement in the new development will pollute Keauhou Bay</p>	<p>Michael Hanly</p>	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Section 4.12.2 of the EIS addresses wastewater treatment and disposal. The Project will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean.</p>
<p>A wastewater force main and other wastewater infrastructure also pass through the near shore area. (See, Dashed orange (force main) and red (other infrastructure) lines in Fig. 4-43 above.) The EIS acknowledges that this area will be affected by SLR but does not propose any future action other than increasing the amount of sewage that will be flowing through the sewer line. (See, DEIS 4.12.2 at 4-142.) A SLR induced wastewater line break in this area is predictable. It will have a devastating impact on the bay and will severely affect all of the tenants and users of the bay—perhaps shutting down the commercial operations for months. The potential liability is likely to be substantial. In the recent past the wastewater force main has been exposed by high surf events. This risk should be mitigated (in fact avoided) by relocating the wastewater force main and other wastewater infrastructure to the Old Kona Road.</p> <p>This section states "Upon completion of the Project environmental accidents are not anticipated, however if an environmental accident is to occur, DOH will be notified immediately." When the wastewater force main breaks it will</p>	<p>Carolyn Leilani Carter</p>	<p>Section 4.12.2 of the EIS addresses wastewater treatment and disposal for the KBMP. Wastewater generated by the Project will be collected via a sewer main along Old Kona Road and conveyed through existing infrastructure to the He'eia Wastewater Reclamation Facility (WWRF) for treatment. Hawai'i Water Service has confirmed that capacity exists to accommodate the Project's estimated flow.</p> <p>The Project intends to connect to existing infrastructure to limit ground disturbance during construction. Further evaluation will determine whether any capital improvements to the WWRF or conveyance systems are necessary to support increased flow.</p> <p>Kamehameha Schools does not own the wastewater conveyance system, nor the WWRF, and therefore cannot initiate relocation. However, Kamehameha Schools acknowledges the potential impacts of sea level rise on this infrastructure and will collaborate with the County and utilities to explore proactive solutions that enhance long-term system resilience. Kamehameha Schools remains open to cooperating with utility providers should they</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>be too late for DOH to do anything to save the bay. The EIS has acknowledged a 3.2ft. sea level rise. These are predictable adverse effects that can be avoided by moving wastewater infrastructure further from the shoreline. Reconstruction of the Old Kona Road seems like an ideal and more cost-effective time to undertake this important mitigation instead of in response to a predictable environmental disaster.</p>		<p>decide to relocate infrastructure in the future as part of their mitigation strategies.</p>
<b>Wildfire Management</b>		
<p>I am providing these written comment pursuant to the Keauhou Bay Management (KBM) Plan Environmental Impact Statement (EIS) Notice; KBM Plan dated March 2022. Issued by Kamehameah Schools Bishop Estates (KSBE) Applicant.</p> <p>My husband, Brian, and I are community members of the Bayview Estates of Keahou, a subdivision whose community borders the KSBE properties. As neighbors for over a decade, we hold deep respect, appreciation and reverence for KSBE and all that it does for our Hawaii Island Community.</p> <p>We are also completely aligned/and support the KBM Plan and wholeheartedly support KSBE efforts to build cultural awareness and "ohana" for all.</p> <p>I am also grateful for the opportunity to comment on the KBM Plan.</p> <p>With the KBM Plan EIS Notice dated March 2022, it is recommended that Section 3.4.6 Wild Land Fires be updated and revised to reflect wild fire safety mitigation efforts being recognized throughout the state of Hawaii in the aftermath of last summer's August 2023 tragic Lahaina/Maui fire. As you are likely aware, the Big Island experienced wild fires along the Kohala Coast as a result of the same wind conditions experienced in the August 2023 Maui fire.</p>	<p>Leslie Schmitz</p>	<p>Mahalo for your recommendations to incorporate Firewise Safety strategies into the KBMP. Firewise communities play a critical role in reducing wildfire risk, particularly in areas where development borders wildland vegetation.</p> <p>Kamehameha Schools acknowledges the heightened awareness around wildfire risks, particularly in the aftermath of recent wildfire events across the State. These events have underscored the importance of comprehensive and proactive wildfire mitigation measures to protect communities, homes, and natural resources.</p> <p>Kamehameha Schools understands the concerns raised regarding the potential for wildfires to threaten both new development and neighboring communities, including Bayview Estates. The addition of new structures within the Project Area requires a proactive approach to integrate fire safety into the design and implementation of the management plan. The Project will be reviewed by the County and comply with all County fire code requirements.</p> <p>Although the Project does not include the construction of homes or the presence of full-time residents, at Kamehameha Schools, stewarding our 'āina to support the resiliency and safety of our communities is our top priority.</p> <p>Protecting Hawai'i from wildfire is a shared kuleana – one that requires the collaboration of government, Hawaiian Electric, landowners, businesses, and homeowners alike.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Please note the following comments focused on Section 3.4.6 Wild Land Fires of the KBM Plan/See Section 3.4.6 Wild Land Fires (excerpted):</p> <p>It is my understanding that the land areas designated in the KBM Plan itself as well as surrounding areas including HI County Ag5 Designated lands owned by KSBA are considered HIGH Fire Risk by HI-County.</p> <p>With the introduction of new housing and other buildings in the KBM Plan, these new structures will be vulnerable to wild land fires. This new development will also increase the risk of wildfires to neighboring lands and communities, including our in Bayview Estates community.</p> <p>Shortly after the Maui fire last summer, Bayview Estates created the Bayview Estates Fire Safety Committee of which I am a member. Part of my involvement with the Fire Safety Committee included the following research on wild fire safety which was shared with our Bayview Community members:</p> <p>PLEASE SEE ATTACHED DOCUMENT FOR RELEVANT LINKS AND REFERENCES IN THE BELOW COMMENTS:</p> <ul style="list-style-type: none"> <li>•The primary threat to a home or building during a wildfire is embers and small flames from burning pieces of wood and/or vegetation that become airborne. These airborne embers and small flames can be carried more than a mile causing spot fires and igniting homes and structures as well as debris and other objects along the way.</li> <li>•Studies have show that homes/structures ignite due to the condition of the home and everything around the home/structure called the Home Ignition Zone Understanding the Wildfire Threat to Homes. An overview of fire history, fire basics, and how homes burn.</li> </ul>		<p>Kamehameha Schools has been working alongside government agencies and contracted industry experts to develop and carry out a range of mitigation strategies tailored to the needs of specific communities. This includes conducting inspections, managing vegetation, clearing illegal dumping, and reintroducing native plants.</p> <p>Kamehameha Schools is also partnering with organizations like the Hawai'i Wildfire Management Organization to raise public awareness and strengthen community involvement in wildfire prevention, including ways individuals can kōkua to protect their communities.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>I would like to recommend the following Firewise Safety/Mitigation language be added to the KBM Plan Section 3.4.6 to include:</p> <ol style="list-style-type: none"> <li>1.Creating a strategy to mitigate potential effects of wildfires on property and risk to lives including developing and adopting Firewise Landscaping/Hardscaping Guidelines for the homes/structures envisioned in the KBM Plan.</li> <li>2.Forming a Firewise Safety Committee using the Waikalo Homeowners Association as an example and adopting guidelines which could be added to Section 3.4.6:  <a href="https://www.waikoloa.org/fire/">https://www.waikoloa.org/fire/</a></li> <li>3.Removing (in partership with HECO and Kona Country Club golf course) currently inactive HECO powerlines from KSBE AgFive Designated areas. Efforts are already underway with HECO on other islands to remove inactive HECO lines and the KBM Plan would include the removal of unused, de-energized powerlines to mitigate wild fire.</li> <li>4.Partnering with HECO to identify and remedy risks caused by exposed, active powerlines located on the new KBM Plan including burrying lines for new construction.</li> </ol> <p>I am happy to provide any additional assistance in drafting langugage to include in Section 3.4.6 Wild Fire Safety or otherwise be of service to KSBE and the KBM Plan.</p>		
<b>Water Management</b>		
<p>Water use greatly increased if Resort is successful. My understanding is that our area’s water supply is already suffering a capacity issue with little hope of improving.</p>	<p>Rolin Stonebraker-Soles</p>	<p>Section 4.12.1 of the EIS evaluates water supply needs for the KBMP. Estimated average water demand is approximately 95,879 gallons per day, based on projected potable and irrigation use.</p> <p>Kamehameha Schools holds an existing allocation of 240 water credits for the Project Area through an agreement with the County of Hawai’i Water Board. The County of Hawai’i DWS has confirmed that Kamehameha Schools’ water credits are sufficient to support the Project. The credits being utilized for the Project are existing</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>allocated and entitled credits not dependent on new water source development.</p> <p>According to the 2017 Hawai'i Water Use and Development Plan Update, projected demand, including authorized planned uses such as the KBMP, remains below the sustainable yield threshold for the Keauhou Aquifer System, indicating that water withdrawals associated with the Project are not expected to result in adverse cumulative impacts.</p> <p>Water conservation measures will be incorporated into Project design and may include efficient irrigation systems such as drip irrigation and moisture sensors, use of non-potable water for irrigation, drought-tolerant landscaping, and ultra-low flow fixtures and toilets.</p> <p>Coordination with the County DWS will continue through the design phase, with final construction plans to be reviewed and approved by DWS and the Hawai'i Fire Department.</p>
<p>Drought Conditions and Water Consumption Limits: Kona is experiencing significant drought conditions, and residents are frequently subject to water consumption limits. Introducing another resort in this area, which already has substantial resort development, will place further strain on our limited water resources. This development will likely, in the long term, prioritize water use for tourists over residents, exacerbating existing water shortages. Recommendation: Develop a comprehensive water management plan that prioritizes conservation and sustainable use. This should include advanced water-saving technologies such as greywater recycling, rainwater catchment, and low-flow fixtures. Additionally, the project should commit to offsetting its water use by contributing to community water conservation initiatives and infrastructure improvements.</p>	Alexis Kerver	<p>Section 4.12.1 of the EIS evaluates water supply needs for the KBMP. Estimated average water demand is approximately 95,879 gallons per day, based on projected potable and irrigation use.</p> <p>Kamehameha Schools holds an existing allocation of 240 water credits for the Project Area through an agreement with the County of Hawai'i Water Board. The County of Hawai'i DWS has confirmed that Kamehameha Schools' water credits are sufficient to support the Project. The credits being utilized for the Project are existing allocated and entitled credits not dependent on new water source development.</p> <p>According to the 2017 Hawai'i Water Use and Development Plan Update, projected demand, including authorized planned uses such as the KBMP, remains below the sustainable yield threshold for the Keauhou Aquifer System, indicating that water withdrawals associated with the Project are not expected to result in adverse cumulative impacts.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>Water conservation measures will be incorporated into Project design and may include efficient irrigation systems such as drip irrigation and moisture sensors, use of non-potable water for irrigation, drought-tolerant landscaping, and ultra-low flow fixtures and toilets.</p> <p>Coordination with the County DWS will continue through the design phase, with final construction plans to be reviewed and approved by DWS and the Hawai'i Fire Department.</p>
<p>Proposed project lacks necessary water credits The DEIS states that the proposed project will require 146,199.2 GPD as its max daily demand, 487,330.8 GPD for total peak hour demand, and 97,466.2 GPD total average daily demand (5-10, Table 5.2). Yet, the average water demand is assumed to be 86,385 GPD which is equivalent to 240 water credits which is significantly less. All of the three water projections for max daily demand, total average daily demand, and total peak hour demand are well beyond the equivalent water credits. Each water credit is equivalent to 400 GPD. The total peak hour demand requires 1,218 water credits, total peak hour, 365 water credits for max daily demand, and 243 water credits for the total average daily demand. Comments submitted by the DWS in Table 7.2 clarify that, "Please be informed that the applicant has assigned 101 units of water to TMK 7-8-010:044 through an executed Water Agreement with the Water Board, dated April 4, 2012. Additional water could be made available subject to the Water Board's approval." Thus, the proposed project does not have necessary water credits for the project to proceed. How can this project proceed when it does not have the necessary water credits that it is estimated to use? Repeatedly, the DEIS states that KS will work with DWS when the necessary water credits are not confirmed available for this proposed project. The project should be denied until such credits are obtained by DWS and necessary impacts to ecosystems and cultural practices analyzed with full consultations. Kona has major water</p>	<p>Loke Aloua</p>	<p>The water for the KBMP will be sourced from the existing County of Hawai'i Department of Water Supply (DWS) Kona Water System, which draws from the Kahalu'u Shaft Wells. These wells supply water to the region, including the Keauhou Bay area, and are designed to support growth and development within the local infrastructure.</p> <p>Section 4.12.1 of the EIS evaluates water supply needs for the KBMP. Water demand calculations were updated for the Final EIS and estimate an average daily demand of approximately 95,879 gallons, accounting for both potable and irrigation uses. The revised estimate reflects a reduction in demand, primarily due to adjustments in landscape irrigation projections. Final landscape and irrigation plans have not yet been developed and will be prepared during the detailed design phase. Irrigation system design will be based on the Project's existing allocated water supply. Coordination with the County Department of Water Supply (DWS) will continue throughout the design phase. Final construction plans will be submitted to DWS for review and approval.</p> <p>Kamehameha Schools holds an existing allocation of 240 water credits for the Project Area through an agreement with the County of Hawai'i Water Board. The County of Hawai'i DWS has confirmed that Kamehameha Schools' water credits are sufficient to support the Project. The credits being utilized for the Project are existing allocated and entitled credits not dependent on new water source development.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>issues. This is the dryside of the island and everyone is developing like freshwater is infinite. KS claims this project has been scaled back but really it is still too big even for the amount of water that is available for this parcel. 101 credits translates to approximately 40,400 GPD. Where is the development for this type of allotted water use? I have the following questions: How many water credits does KS have in possession for this proposed development? How will KS acquire additional water credits? Are additional water credits available? Where will the well for the project be supplying the development with water be located? What are the environmental impacts of withdrawal on groundwater dependent species, near and deep shore fisheries? What are the impacts of water use on traditional and customary practices? What ahupua'a will be supplying this proposed project with its potable water?</p>		<p>According to the 2017 Hawai'i Water Use and Development Plan Update, projected demand, including authorized planned uses such as the KBMP, remain below the sustainable yield threshold for the Keauhou Aquifer System, indicating that water withdrawals associated with the Project are not expected to result in adverse cumulative impacts to the aquifer.</p> <p>Water conservation measures will be incorporated into Project design and may include efficient irrigation systems such as drip irrigation and moisture sensors, use of non-potable water for irrigation, drought-tolerant landscaping, and ultra-low flow fixtures and toilets.</p> <p>Coordination with the County DWS will continue through the design phase, with final construction plans to be reviewed and approved by DWS and the Hawai'i Fire Department.</p> <p>The Project does not propose the development of a new water well, as it will rely on existing allocated water credits for its operational needs. Because no additional groundwater withdrawals are planned, there are no anticipated impacts to groundwater-dependent species, including nearshore or deepwater fisheries resulting from such withdrawals. The use of pre-existing water allocations also eliminates potential adverse effects to cultural practices associated with traditional and customary uses. For a detailed analysis of cultural resources, refer to Section 4.1 of the FEIS.</p>
<p>What is more, freshwater supplies are not guaranteed in this dry region, so one wonders how existing wells will handle an increase in demand.</p> <p>Drought Conditions On Hawai'i Island Prompt Water Supply Message With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely. Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information from the U.S. Drought Monitor. There</p>	Michael Hanly	<p>Section 4.12.1 of the EIS evaluates water supply needs for the KBMP. Estimated average water demand is approximately 95,879 gallons per day, based on projected potable and irrigation use.</p> <p>Kamehameha Schools holds an existing allocation of 240 water credits for the Project Area through an agreement with the County of Hawai'i Water Board. The County of Hawai'i DWS has confirmed that Kamehameha Schools' water credits are sufficient to support the Project. The credits being utilized for the Project are existing allocated and entitled credits not dependent on new water source development.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>is an area under “Abnormally Dry” conditions in South Kona, however there are other, small pockets on the Big Island that are under “Severe Drought”. There is even a small spot of “Extreme Drought” in the South Point area of Ka’ū. 12 “The National Weather Service’s forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event,” reported the Hawai’i County Department of Water Supply. “Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024.” From the Water. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues By Li Cohen And recent years have seen compounding problems: less rain, leading to significant droughts, and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the world's largest surfing wave pool opened up on the island – filled with freshwater. "They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe." "We are in a water crisis, that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawai'i, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."</p>		<p>According to the 2017 Hawai’i Water Use and Development Plan Update, projected demand, including authorized planned uses such as the KBMP, remains below the sustainable yield threshold for the Keauhou Aquifer System, indicating that water withdrawals associated with the Project are not expected to result in adverse cumulative impacts to the aquifer.</p> <p>Water conservation measures will be incorporated into Project design and may include efficient irrigation systems such as drip irrigation and moisture sensors, use of non-potable water for irrigation, drought-tolerant landscaping, and ultra-low flow fixtures and toilets.</p>
<b>Natural and Manmade Hazards</b>		
<p>13. The EIS Fails To Consider Tsunami Impacts On The Cultural Center Presumably, the proposed "Cultural Center" would contain hawaiian artifacts etc... However, the buildings that Project proponent proposes to utilize as a "Cultural Center" were badly damaged during the last tsunami (which was a relatively small tsunami.) If the Culture</p>	<p>Jeff Caufield</p>	<p>The Project includes the adaptive reuse of the two historic bayfront buildings for a new cultural education and heritage center.</p> <p>Section 4.7.5 of the EIS addresses tsunami inundation. The entire Project Area, including the proposed cultural education and heritage center, lies within the Hawai’i County Civil Defense Agency’s designated Tsunami Evacuation Zone. These structures</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Center had been in operation during the last tsunami, precious artifacts would have been lost and/or destroyed. Instead, as the buildings housed snorkel tour businesses, all that was damaged was the buildings and their easy to replace contents. It is inconceivable that any entity that purports to be charged with a duty to protect cultural heritage would place a Culture Center at one of the highest at risk locations on the islands. (Due to Keauhou Bay's triangular shape and rapidly rising depths, a tsunami wave from a westerly direction is channeled, funneled and magnified by the shape of the bay.) This makes Keauhou Bay one of the locations on the western side of the island most likely to experience the largest tsunami impacts. The report fails to mention that entire buildings adjacent to the proposed Culture Center were destroyed by the last tsunami nor are any mitigation measures proposed. Without any information in the EIS it is unclear what if any protection would exist for the Cultural Center and any artifacts inside.</p>		<p>are also situated in a FEMA-designated VE coastal flood zone with velocity hazard. Any improvements or modifications will be subject to applicable building codes and permit requirements, including those related to flood hazard areas.</p> <p>New construction and substantial site improvements will require compliance with the County's floodplain management regulations (Section 27 of the County Code). Therefore, the risk of potential damage from these flood hazards should be minimized by compliance with County requirements.</p> <p>The repurposed cultural education heritage center buildings may be retrofitted to help mitigate storm surge and tsunami risks by applying external coatings to the walls that are impervious to water and providing temporary flood shields at openings and doors. Low flood walls and berms could also be integrated around the buildings that can help divert the storm surge around the buildings. Additional design improvements will be included as required by the County during design and building permit review and approval for the Project.</p> <p>Artifacts will not be stored in the cultural and heritage center.</p>
<p>The DEIS adversely and significantly impacts the effects caused by climate change already felt in this area: As the November 2nd U.S. Drought Monitor detailed, most of the Big Island is under a D2 Severe Drought, with a few spots of D3 Extreme Drought. By constructing a 150-unit resort, 188 resort parking spaces, 60 more parking spaces for the retail center, more commercial spaces, a restaurant, and a cultural/educational center, the DEIS proposes to replace forested lands with hardscape. When deforestation occurs, much of the carbon stored by trees is released back into the atmosphere as carbon dioxide. This in turn influences local temperature and climate, which in turn creates more drought conditions, severe weather events, and sea level rise.</p>	Tamyra Rice	<p>The Project does not propose the removal of native forests. A portion of the Project Area mauka of Old Kona Road will be developed for the low-impact lodging. Currently, this portion of the Project Area above 'Ahu'ula cliff is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or carbon sequestration benefits. The Project does not propose the removal of native forests.</p> <p>Landscaping improvements throughout the Project Area will include native plant restoration, replacing certain areas currently dominated by invasive species. These efforts will support carbon sequestration, improve biodiversity, and enhance ecosystem function. In addition, the implementation of a comprehensive management plan will result in more active stewardship of landscaped areas, including invasive species removal and ongoing</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>“Reduced rainfall from climate change reduces submarine groundwater discharge and increases salinity of nearshore waters. Future urban development coupled with elevated water demand will likely further decrease submarine groundwater discharge and increase salinity in coastal springs. Protecting native forests prevents the further loss of freshwater and further increases in salinity.” “As it is critical to incorporate an imminent rise in sea level and other climate change effects into plans for future development, these impacts should also be considered when drafting an EIS.” The DEIS states: “The project would not affect climatic conditions; therefore, no mitigation measures are required. The KBMP may add activities that result in minimal greenhouse gas emissions (GHGs), which are known to warm global climate....” (DEIS at 4.2.1) The DEIS fails to consider the negative impact of deforestation caused by the project and fails to adequately assess its contribution to climate change. One mitigation measure might be to forego the building of the 150-unit resort to reduce deforestation.</p>		<p>maintenance, further promoting long-term environmental resilience and climate mitigation benefits.</p> <p>The Project integrates Low-Impact Development (LID) principles to manage stormwater through strategies that replicate natural hydrologic processes. These practices, such as infiltration and retention systems, will reduce runoff and support localized water recharge. Impacts to the water table and ability for groundwater to discharge to the bay are not anticipated. The project’s detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai’i.</p> <p>A discussion of climate and rainfall is included in Section 4.2.1 of the EIS. A discussion on air quality is included in Section 4.2.2. Climate change and sea level rise is discussed in Section 4.7.6 of the EIS.</p> <p>Emissions from construction are anticipated to be minimal and temporary due to the low intensity and limited scale of construction activities. Compliance with HAR §11-60.1-33, and implementation of a dust control management plan, including Best Management Practices such as dust suppression and vegetative cover replacement, will help minimize short-term air quality impacts. While operational activities may result in minor increases in criteria pollutants and GHG emissions, these are not expected to significantly affect surrounding air quality or regional climate conditions.</p>
<b>Air Quality</b>		
<p>Air Impacts The DEIS fails to address air impacts from the Project. As mentioned previously, a large number of additional motorized vehicles and vessels will be added to the area. However, there have been no studies of existing air</p>	Jennie Shield	<p>Section 4.2.2 of the EIS addresses air quality impacts associated with the KBMP and provides an assessment of the potential air quality impacts associated with both construction and operational phases of the project.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
quality conditions relative to the projected conditions with more vehicular traffic.		<p>The DEIS references data from the Hawai'i Department of Health's (DOH) Clean Air Branch (CAB), which monitors air quality at various locations across the island. Specifically, the closest air monitoring station to the Project Area is located in Kona, approximately 7 miles from the site. This station regularly measures particulate matter (PM) and sulfur dioxide (SO<sub>2</sub>), which are key indicators of air quality. The 2021 data confirms that the state of Hawai'i is in general attainment of all National Ambient Air Quality Standards (NAAQS), excluding occasional exceedances due to volcanic activity, which is a natural phenomenon impacting air quality across the entire island.</p> <p>Short-term impacts are expected during construction activities such as grading, paving, and site preparation, which will generate emissions of criteria pollutants and greenhouse gases. These emissions are anticipated to be minimal due to the limited scale and intensity of construction and are expected to be temporary and localized. The Project will comply with HAR §11-60.1-33 regarding fugitive dust, and a dust control management plan will be implemented, along with Best Management Practices such as replacing ground cover of the disturbed area, providing adequate water sources at the site, and managing construction vehicle speeds.</p> <p>For long-term operations, air quality considerations include emissions from stationary sources and mobile activities within the Project Area. While some increase in pollutants and greenhouse gases is expected, emissions are not projected to be significant enough to adversely affect surrounding air quality, and no mitigation measures are proposed.</p>
4. The EIS Fails To Address Air Impacts From The Project The Project proposes to build a large resort, commercial center, cultural center and commercial kiosks. In building the project roughly 20+ acres of existing native forest will be destroyed to build the resort. As discussed supra, potentially thousands of additional vehicle trips will be added to the area without any analysis as to what the existing air quality	Jeff Caufield	<p>Section 4.2.2 of the EIS provides an assessment of potential air quality impacts associated with the KBMP, addressing both construction and operational phases of the Project.</p> <p>The DEIS references data from the Hawai'i Department of Health's (DOH) Clean Air Branch (CAB), which monitors air quality at various locations across the island. Specifically, the closest air monitoring station to the Project Area is located in Kona, approximately 7</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>conditions are nor the impact of the additional vehicular and project features are to the local air quality. For example, even if the cultural center only has a fraction of the visitation as the 300,000 plus visitors that visit the City of Refuge, that could generate tens of thousands of additional vehicle trips to the bay area on a yearly basis and have potential consequences to the local air quality. (Note: The area is generally not served by any public transportation, which necessitates vehicular travel.) A study needs to be conducted as to existing air quality and future projected air quality impacts from the project, including destruction of forest.</p>		<p>miles from the site. This station regularly measures particulate matter (PM) and sulfur dioxide (SO<sub>2</sub>), which are key indicators of air quality. The 2021 data confirms that the state of Hawai‘i is in general attainment of all National Ambient Air Quality Standards (NAAQS), excluding occasional exceedances due to volcanic activity, which is a natural phenomenon impacting air quality across the entire island.</p> <p>A portion of the Project Area mauka of Old Kona Road will be developed for the low-impact lodging. Currently, this portion of the Project Area above ‘Ahu‘ula cliff is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or carbon sequestration benefits. The Project does not propose the removal of native forests.</p> <p>Landscaping improvements throughout the Project Area will include native plant restoration, replacing areas currently dominated by invasive species. These efforts will support carbon sequestration, improve biodiversity, and enhance ecosystem function. In addition, the implementation of a comprehensive management plan will result in more active stewardship of landscaped areas, including invasive species removal and ongoing maintenance, further promoting long-term environmental resilience.</p> <p>Short-term impacts are expected during construction activities such as grading, paving, and site preparation, which will generate emissions of criteria pollutants and greenhouse gases. These emissions are anticipated to be minimal due to the limited scale and intensity of construction and are expected to be temporary and localized. The Project will comply with HAR §11-60.1-33 regarding fugitive dust, and a dust control management plan will be implemented, along with Best Management Practices.</p> <p>For long-term operations, air quality considerations include emissions from stationary sources and mobile activities within the Project Area. While some increase in pollutants and greenhouse gases is expected, emissions are not projected to be significant</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>enough to adversely affect surrounding air quality, and no mitigation measures are proposed.</p> <p>Appendix M to the DEIS includes a detailed mobility analysis report that analyzes the Project’s potential impacts to traffic operations. According to the report, the Project is estimated to generate approximately 1,928 new daily weekday vehicle trips. This minimal increase in vehicle activity is not expected to result in significant impacts to air quality or contribute to a measurable degradation of ambient air conditions.</p> <p>The Project will adhere to local, state, and federal air quality regulations. Given the small scale of the development and the relatively low intensity of proposed operations, the impacts on regional air quality are expected to remain within acceptable limits.</p>
<p>Since the traffic forecasts are erroneous, all air quality and noise analysis are also in error. The noise disruption from traffic along Kamehameha III Road is already disruptive. As noted above, the majority of both background traffic volume and project generated traffic volume will use Kamehameha III Road. Traffic congestion, noise (duration and intensity), and air quality impacts will significantly worsen, particularly for residents adjacent to this section of the road. We request that Air Quality and Noise studies be revised to reflect the significant shift in traffic volume associated with the development and through road connection that is part of the proposed action. In summary, we request that a Supplemental DEIS be prepared for public review to address an updated traffic analysis addressing the items noted above, any associated Noise and Air Quality analyses, and other non-traffic issues.</p>	<p>David Markley</p>	<p>Section 4.2.2 of the EIS provides an assessment of potential air quality impacts associated with the KBMP, addressing both construction and operational phases of the Project.</p> <p>The DEIS references data from the Hawai’i Department of Health’s (DOH) Clean Air Branch (CAB), which monitors air quality at various locations across the island. Specifically, the closest air monitoring station to the Project Area is located in Kona, approximately 7 miles from the site. This station regularly measures particulate matter (PM) and sulfur dioxide (SO<sub>2</sub>), which are key indicators of air quality. The 2021 data confirms that the state of Hawai’i is in general attainment of all National Ambient Air Quality Standards (NAAQS), excluding occasional exceedances due to volcanic activity, which is a natural phenomenon impacting air quality across the entire island.</p> <p>Short-term impacts are expected during construction activities such as grading, paving, and site preparation, which will generate emissions of criteria pollutants and greenhouse gases. These emissions are anticipated to be minimal due to the limited scale and intensity of construction and are expected to be temporary and localized. The Project will comply with HAR §11-60.1-33 regarding</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>fugitive dust, and a dust control management plan will be implemented, along with Best Management Practices.</p> <p>For long-term operations, air quality considerations include emissions from stationary sources and mobile activities within the Project Area. While some increase in pollutants and greenhouse gases is expected, emissions are not projected to be significant enough to adversely affect surrounding air quality, and no mitigation measures are proposed.</p> <p>Appendix M to the DEIS includes a detailed mobility analysis report that analyzes the Project’s potential impacts to traffic operations. According to the report, the Project is estimated to generate approximately 1,928 new daily weekday vehicle trips. This minimal increase in vehicle activity is not expected to result in significant impacts to air quality or contribute to a measurable degradation of ambient air conditions.</p> <p>The Project will adhere to local, state, and federal air quality regulations. Given the small scale of the development and the relatively low intensity of proposed operations, the impacts on regional air quality are expected to remain within acceptable limits.</p> <p>Section 4.13 of the EIS addresses potential noise impacts associated with the KBMP, supported by a detailed Noise Assessment included in Appendix O. The assessment evaluates both short-term and long-term noise conditions. Short-term impacts may result from construction-related activities, which could temporarily affect nearby residences and uses due to increased frequency and exposure to noise. Long-term impacts could include increased noise from traffic, hospitality operations, and cultural or educational programming within the Project Area.</p> <p>While future noise levels are expected to increase slightly due to construction and traffic, the assessment concludes that overall noise levels will remain within acceptable thresholds. The most notable increases, ranging from 11 to 13 dB, are projected in currently undeveloped areas along Old Kona Road but are not anticipated to exceed FHA/HUD standards of 65 DNL or the Hawai’i Department of Transportation’s significant increase</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		criterion of 15 dB. Planned resort and construction activities will be required to comply with local Department of Health noise regulations to avoid adverse impacts.
How will you mitigate the extra noise and air pollution from construction truck traffic along Ali'i Dr and Kaleiopapa St by my condo (Keauhou Akahi 78-7030 Ali'i Dr)? I don't know what to suggest for the air pollution, but I hope your bright minds can come up with something.	Marjorie Bryant	<p>Section 4.2.2 of the EIS evaluates air quality impacts associated with both construction and operational phases of the KBMP. Based on monitoring data from the nearest air quality station in Kona, the area is generally in attainment of National Ambient Air Quality Standards, aside from occasional exceedances due to volcanic activity. Construction activities such as grading and paving are expected to produce minimal and temporary emissions of criteria pollutants and greenhouse gases. These impacts will be managed through compliance with fugitive dust regulations and the implementation of a dust control management plan and Best Management Practices. Operational emissions from on-site sources and traffic are anticipated to be minor and are not expected to result in significant degradation of air quality.</p> <p>Section 4.13 of the EIS addresses noise impacts and is supported by a detailed Noise Assessment. Construction activities may temporarily elevate noise levels for nearby uses, while long-term sources include increased traffic and programmatic activities associated with hospitality, cultural, and educational uses. Although noise levels are expected to rise slightly, particularly in undeveloped areas along Old Kona Road, projected increases remain within regulatory thresholds. No exceedances of FHA/HUD or Hawai'i Department of Transportation noise standards are anticipated, and all construction and operational activities will be required to comply with Department of Health noise regulations.</p>
<b>ADA</b>		
<p>The general area of concern is that of ADA compliant access for persons with disabilities for all elements of the proposed management plan.</p> <p>It is apparent that the most recent plan does address some of the accessibility issues that I and others raised in the initial comments. And for that, those both with disabilities</p>	Lewis Brentano	A key goal of the KBMP is to improve accessibility throughout the Project Area in accordance with the Americans with Disabilities Act (ADA). Accessibility improvements will be included as required by the County of Hawai'i and the State Disability and Communication Access Board during design and building permit review and approval for the project.

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>are grateful. However, there are at least five other areas that appear inadequately addressed or not addressed at all in terms of ADA compliant access in the plan.</p> <p>1. ADA compliant access from the north side of the KOA to the south side - A first area of concern is the access for disabled people from the north side of Keauhou Bay to the south provide access to all the facilities on the southside, Today, anyone in a wheelchair or with mobility challenges has to go to Ali'i Drive and walk all the way to the Outrigger hotel to get to the south side of bay - a distance of over mile and a half on a busy road. It appears from the renderings of the improvements to Old Kona Road that there will be a multi-use pathway parallel to the road itself that would go from north side of the bay to the south side, but it still appears to be a long distance compared to providing ADA compliant access from the Kamehameha III road cul-de-sac, directly across the area above the beach on the bay, to the South side. I do not see in the plan any indication of pedestrian access from the cul-de-sac to the other side of the bay where the heritage center would be.</p> <p>2. ADA compliant access to the lobby of the lodging area. There is no evidence or statement about making the lodging lobby accessible – all the rendering drawings and comments show two different sets of steps to go from street level to the lobby entrance. If such accessibility is intended, it needs to be stated directly in obviously in your plan.</p> <p>3. ADA Compliant access to lodging units. The third area would be the lodging units themselves as depicted at best 1/3 of the units would be accessible in terms of entry, and there is no mention of building accessible, bathrooms, bedrooms, etc., in the actual units. This seems to be an issue that must be addressed early on in the design phase.</p> <p>4. Too few ADA complaint Handicapped Parking places The area of accessibility is related to number accessible. Parking places stated in the document and in the plans – – you</p>		<p>The Project includes enhancements to Old Kona Road, which serves as a vital connection between the north and south sides of Keauhou Bay. The road will be improved to function as the primary pedestrian and vehicular linkage, and a promenade along this corridor will be designed to meet ADA and County standards.</p> <p>Planned facilities, including the cultural education and heritage center buildings and the lobby and units of the low-impact lodging, will be constructed to ensure ADA accessibility. Additionally, the Project will comply with County parking requirements and include designated handicap parking stalls as required.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>know that you will build 126 parking places for the retail area, but only five handicap places this is too small, a percentage of spaces, especially given likelihood that a good number of visitors and tourists would most likely be senior citizens. I'm sure there are ADA guidelines on percentages of handicap, parking places, but would it seem 15 to 20% of spaces should be a minimum out of the 126 total.</p> <p>5. ADA compliant access to Heritage Center. In the rendering and description of the heritage center there is no indication of ADA compliant access to the building. The rendering only shows a stair entry and no indication of a ramp or lift.</p>		
<b>Sea-Level Rise</b>		
<p>“The queen-mother [Keōpūolani] had just bathed in the cold water near the southern extremity of Ke-au-hou’s formerly picturesque white sand-beach, and a few steps into the sea, where slowly gushed the now mostly destroyed sea-spring of Ku-hala-lua.” A comparison of this passage to the current Ka’ili’ilinehe Beach shoreline (see Figures 3-12 and 3- 13) shows a heavily modified shoreline and very little, if any, of a white sand beach. I observe that the existing beach sand is at best mixed with volcanic/basalt cobbles (and aesthetically dissimilar) and at worst contaminated with runoff-generated sediment and asphalt (no technical evaluation has been conducted). The proposed Project, despite attesting to improving the “shoreline access” acknowledges that no project elements are at the shoreline, and thus the project indirectly preserves the degraded beach while proposing elements which may further degrade the beach and shoreline more broadly (through additional stormwater/runoff generated sedimentation due to increase in hardscape/imperious surfaces [Figure 3-35] and potential nutrient/contaminant/bacteria transport via groundwater, for example, as discussed below).</p>	Nicholas Buhbe	<p>The Project does not propose any improvements to the shoreline. Ka’ili’ilinehe Beach remains a public shoreline area, and the KBMP preserves access to this location. The adjacent area within the Project Area is designated for passive recreation and open space, supporting continued cultural and recreational use while maintaining the natural shoreline setting.</p> <p>The Project’s stormwater management plan and long-term Best Management Practices (BMPs) are designed to safeguard Keauhou Bay’s water quality both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements.</p> <p>Currently, the lands surrounding Keauhou Bay lack adequate stormwater and drainage infrastructure. As a result, rainfall events can cause untreated runoff and contaminants from roadways and other surfaces to enter directly into the bay. To address this issue, the Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce sediments and pollutants reaching the shoreline and Ka’ili’ilinehe Beach.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>4.7.6 Climate Change and Sea Level Rise: The DEIS acknowledges that a significant amount of sea level rise is expected in the project area and plans for up to 4 feet by 2100. “The primary means of mitigation for the KBMP is avoidance.” “Potential Impacts and Mitigation Measures” at page 4-109. As discussed below (DEIS 4.12” Infrastructure and Utilities”), the water and sewer force mains along with telecommunications and electrical lines are in the Ka’ili’ilinehe Recreation Corridor at the water’s edge, buried behind the long-standing seawall. The KBMP acknowledges that a “a select portion” of the Project Area may experience passive flooding caused by sea level rise (SLR). (DEIS 4.16.5 “Adverse Effects that Cannot be Avoided”) The DEIS should acknowledge that SLR will affect the Ka’ili’ilinehe Recreation Corridor and in particular the water, wastewater, power and telecommunications infrastructure that are now located in the corridor.</p>	<p>Joanne (Jody) Wheeler</p>	<p>Kamehameha Schools does not own the buried infrastructure systems along the shoreline and therefore cannot initiate relocation. However, Kamehameha Schools acknowledges the potential impacts of sea level rise on this infrastructure and will collaborate with the County and utility companies to explore proactive solutions that enhance long-term system resilience. Kamehameha Schools remains open to cooperating with utility providers should they decide to relocate infrastructure in the future as part of their mitigation strategies.</p>
<p>Power and Telecommunications on page 4-144. Electrical and Telecommunications lines also pass through the near shore area. The DEIS acknowledges that this area will be affected by sea level rise but does not propose moving these lines. This risk should be mitigated (in fact avoided) by relocating the electrical and telecommunications lines to the Old Kona Road</p>	<p>Joanne (Jody) Wheeler</p>	<p>Kamehameha Schools does not own the buried infrastructure systems along the shoreline and therefore cannot initiate relocation. However, Kamehameha Schools acknowledges the potential impacts of sea level rise on this infrastructure and will collaborate with the County and utility companies to explore proactive solutions that enhance long-term system resilience. Kamehameha Schools remains open to cooperating with utility providers should they decide to relocate infrastructure in the future as part of their mitigation strategies.</p>
<p>Section 4.16.5, Adverse Environmental Effects that Cannot Be Avoided, identifies long and short term impacts. Pursuant to this section, these impacts are:</p> <p>Long-term Effects</p> <ul style="list-style-type: none"> <li>• A select portion of the Project Area may experience passive flooding as a result of 3.2 ft. of global SLR predicted by 2100. Kamehameha Schools is committed to proactively planning and designing the Project to be resilient to ensure</li> </ul>	<p>Elizabeth Dunn</p>	<p>EIS Section 4.16.1 discusses Cumulative Impacts. The Project’s sustainable tourism model is expected to generate beneficial cumulative impacts by fostering a respectful and reciprocal interaction between visitors, local communities, and the natural and cultural resources of Keauhou. The coordinated development approach, compliance with infrastructure standards, and careful resource management within the framework of county and community development plans mitigate potential impacts. Kamehameha Schools will continue to work with local utilities and</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>the ongoing successful, safe, and sustainable operation of the bay for the foreseeable future.</p> <ul style="list-style-type: none"> <li>• In the long term, traffic volumes in the immediate area are expected to remain similar to without Project conditions. Improved parking and site circulation is expected to have long-term beneficial effects on traffic and public safety.</li> <li>• An increase in visitor accommodations will result in an increase in water consumption, wastewater disposal, and solid waste generation. Therefore, there will be increased demand on existing utilities and infrastructure. Where practical and feasible, sustainable design practices and technology will be utilized to reduce demand requirements.</li> </ul> <p>There are numerous Planning projects that have been approved, and not built to fully understand how the Keauhou Bay proposal will further add to the cumulative negative impacts of this proposal on the community, such as traffic, whether there is water to provide to the proposal, and dealing with sewage. I've read the information in the DEIS; I find it hard to rely upon it given what the public knows about human error at wastewater treatment facilities, the amount of brown water alerts to avoid swimming at local west side beaches, and the inability to rely upon capacity issues at these facilities. I am skeptical.</p> <p>And this is before the issue climate change and Sea Level Rise (SLR). It is ill-advised to spend the money KS anticipates to build such a project when it is adjacent to a bay that had and will continue to experience the negative effects of sea level rise.</p>		<p>agencies to address any further needs, ensuring that the infrastructure demands from these combined projects are effectively managed and aligned with regional growth projections.</p> <p>Section 4.12 of the EIS includes detailed evaluations of the existing infrastructure capacities at Keauhou Bay, such as water, wastewater, solid waste, power, and telecommunications, along with potential impacts, and the necessary upgrades to support the KBMP.</p> <p>The EIS includes analysis to verify that Hawai'i Island's infrastructure systems can accommodate the proposed KBMP. The Project is designed to mitigate potential impacts on local resources through strategic planning, infrastructure upgrades, and sustainable design practices. With the implementation of these actions, the Project is anticipated to contribute positively to the region's growth while minimizing adverse impacts on the island's resources and infrastructure.</p> <p>Proposed development within the projected 3.2 seal level rise inundation area includes the adaptive reuse of the two historic bayfront buildings for a new cultural education and heritage center.</p> <p>Section 4.7 of the EIS addresses sea level rise, flooding, and tsunami inundation. The entire Project Area, including the proposed cultural education and heritage center, lies within the Hawai'i County Civil Defense Agency's designated Tsunami Evacuation Zone. These structures are also situated in a FEMA-designated VE coastal flood zone with velocity hazard.</p> <p>The repurposed cultural education heritage center buildings may be retrofitted to help mitigate storm surge risks by applying external coatings to the walls that are impervious to water and providing temporary flood shields at openings and doors. Low flood walls and berms could also be integrated around the buildings that can help divert the storm surge around the buildings. Additional design improvements will be included as required by the County during design and building permit review and approval for the Project.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		The Project will allow for the continued use of existing bayfront facilities, with planned retrofits designed to support their ongoing function and enhance resilience to future sea level rise. These improvements will enable the structures to remain in use while adapting to changing coastal conditions.
The EIS acknowledges that a significant amount of sea level rise is expected in the project area and plans for up to 3.2 feet by 2100. See, DEIS 4.7.6 “Climate Change and Sea Level Rise” at 4-107. “The primary means of mitigation for the KBMP is avoidance.” Id. “Potential Impacts and Mitigation Measures” at 4-109. As discussed below (DEIS 4.12 “Infrastructure and Utilities”), the water and sewer infrastructure along with telecommunications and electrical lines are located in the Ka`ili`ilinehe Recreation Corridor, buried behind the old seawall in the center of the photo below. See, Fig. 3-13 at 3-19. The KBMP acknowledges that “a select portion” of the Project Area may experience passive flooding caused by sea level rise (“SLR”). (DEIS 4.16.5 at 4- 180, “Adverse Environmental Effects that Cannot be Avoided”) The DEIS should acknowledge that SLR will affect the Ka`ili`ilinehe Recreation Corridor and in particular the water, wastewater, power and telecommunications infrastructure that are now located in the corridor.	Carolyn Leilani Carter	Kamehameha Schools does not own the buried infrastructure systems along the shoreline and therefore cannot initiate relocation. However, Kamehameha Schools acknowledges the potential impacts of sea level rise on this infrastructure and will collaborate with the County and utility companies to explore proactive solutions that enhance long-term system resilience. Kamehameha Schools remains open to cooperating with utility providers should they decide to relocate infrastructure in the future as part of their mitigation strategies.
Has KS limited lateral access along the shoreline to He`eia Bay by hardening the shoreline with rocks? Please provide the permits and approvals for that.	Claudia Rohr	He`eia Bay is not located within the Project Area. As such, no actions related to shoreline armoring are proposed as part of the KBMP.  Kamehameha Schools did conduct some limited natural resource and cultural resource management work at Heeia bay under Permit SAA-21-001817 and SMM-21-000442 AMENDED) approved on June 8, 2022. That work did not include any hardening of the shoreline.  There is an established shoreline public access easement to He`eia bay. More information can be found on the County's website:

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<a href="https://www.planning.hawaiicounty.gov/resources/shoreline-public-access/north-kona">https://www.planning.hawaiicounty.gov/resources/shoreline-public-access/north-kona</a>
<b>Heat (Temperature) Increase</b>		
<p>My third concern is the increased heat and lowered precipitation in my local climate that will be caused by your proposed development, because you will be razing a majority of 29 acres of trees and vegetation and replacing it with black pavement and other hardscape. The science behind this concern is well documented. From <a href="https://www.epa.gov/heatislands">https://www.epa.gov/heatislands</a>: "Conventional paving materials can reach peak summertime temperatures of 120–150 °F (48–67 °C), transferring excess heat to the air above them and heating stormwater as it runs off the pavement into local waterways." Trees make rain, and razing forests decreases rain (supporting science for this sentence is listed at end of this letter and marked by *). Our area has been in a drought for years. It is not a good idea to decrease precipitation in an area of drought. And of course we all know mature trees provide cooling shade. Increased heat from your proposed development will radiate up to my condo, which is right across the golf course above the project site. This will affect my health, and that of my neighbors, most of whom are kupuna like me - not only when we're at home, but when we go out for our daily walks down to Keauhou Bay. Further, it is a documented scientific fact that our climate and oceans are warming increasingly rapidly. Your development will exacerbate this locally. It's going to heat not only the air but the water in the bay. I do not believe this impact - the extra heat and what it will do to our health and the health of the bay and the health of our local ecosystem - can be successfully mitigated. That said, here are some suggestions. I suggest using alternate paving materials that do not generate heat. I also suggest leaving mature shade trees on site in place - and intact. And I suggest planting shade trees (at a maximum distance of 30 ft apart) in your parking lots - and all over your property,</p>	<p>Marjorie Bryant</p>	<p>Mahalo for your recommendations to mitigate urban heat. The Project will mitigate the impacts of extreme heat and urban heat islands through strategic landscaping and restoration efforts.</p> <p>A portion of the Project Area mauka of Old Kona Road will be developed for the low-impact lodging. Currently, this portion of the Project Area above 'Ahu'ula cliff is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or atmospheric cooling benefits. The Project does not propose the removal of native forests.</p> <p>While some larger tree removal may be necessary elsewhere throughout the project area, efforts will be made to restore and enhance native plant communities, including trees, shrubs, and groundcover, in strategic areas. Native plants have a much higher resilience to local climate conditions and play a crucial role in maintaining moisture levels in the environment, which can positively impact local rainfall patterns.</p> <p>Landscaping improvements throughout the Project Area will support carbon sequestration, biodiversity, and improved microclimate conditions. Trees will also be planted in parking areas to increase shade and reduce heat absorption from paved surfaces. These measures, combined with active management of invasive species and maintenance of vegetation, will help moderate local temperatures and mitigate heat island effects.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
including the commercial/retail areas on Ehukai St and Kaleiopapa St. And I suggest planting greenscape on the roofs of your buildings - all buildings, including the commercial/retail areas on Ehukai St and Kaleiopapa St.		
<b>Flood Hazard</b>		
<p>The rules and regulations of the National Flood Insurance Program (NFIP), Title 44 of the Code of Federal Regulations (44CFR), are in effect when development falls within a Special Flood Hazard Area (high-risk areas). Be advised that 44CFR, Chapter 1, Subchapter B, Part 60 reflects the minimum standards as set forth by the NFIP. Local community flood ordinance may stipulate higher standards that ca be more restrictive and would take precedence over the minimum NFIP standards.</p> <p>The owner of the project property and/or their representative is responsible for researching the Flood Hazard Zone designation for the project. Flood zones subject to NFIP requirements are identified on FEMA's Flood Insurance Rate Maps (FIRM). The official FIRMs can be accessed through FEMA's Map Service Center (<a href="http://msc.fema.gov">msc.fema.gov</a>). Our Flood Hazard Assessment Tool (FHAT) (<a href="http://fhat.hawaii.gov">fhat.hawaii.gov</a>) could also be used to research flood hazard information.</p>	Carty Chang	<p>Kamehameha Schools acknowledge the requirements outlined in 44CFR Chapter 1, Subchapter B, Part 60 of the NFIP, which establishes minimum standards for development in Special Flood Hazard Areas (SFHA). Kamehameha Schools also recognizes that local ordinances may have more restrictive standards and will follow the more stringent of the two to comply with all flood management regulations.</p> <p>Kamehameha Schools will coordinate with the relevant authorities and regulatory agencies to obtain required floodplain permits or implement flood hazard mitigation measures as part of the detailed design process.</p>
<b>Beach Restoration</b>		
<p>The existing rock seawall between the two shoreline access points in the Ka`ili`ilinehe Recreation Corridor (Figure 3-13 above) is in poor condition, and the makai side is continually eroded in high surf events. If the water, wastewater, power, and telecommunications lines running behind the wall are relocated to a safer and more resilient location along Old Kona Road then this wall might be removed. The shoreline could then be restored as the beach that existed prior to the wall being built. This would likely be more resilient and provide an improved amenity for bay users. It would also be</p>	<p>Carolyn Leilani                      Joanne (Jody) Wheeler</p>	<p>The Project does not propose any improvements to the shoreline. Ka`ili`ilinehe Beach remains a public shoreline area, and the KBMP preserves access to this location. The adjacent area within the Project Area is privately owned and managed by Kamehameha Schoos via permit. The park is designated for passive recreation and open space, supporting continued cultural and recreational use while maintaining the natural shoreline setting.</p> <p>Kamehameha Schools does not own the buried infrastructure systems along the shoreline and therefore cannot initiate relocation. However, Kamehameha Schools acknowledges the potential impacts of sea level rise on this infrastructure and will</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
a step toward recovering what Keauhou Bay used to be for the whole community		collaborate with the County and utility companies to explore proactive solutions that enhance long-term system resilience. Kamehameha Schools remains open to cooperating with utility providers should they decide to relocate infrastructure in the future as part of their mitigation strategies.
<b>Effects on Nearby Businesses</b>		
My grandson also works w the manta ray dives at Keauhou harbor and believe that this would negatively affect that business.	Helene Spencer	Economic impacts are discussed in Section 4.14 of the Final EIS and include information on the beneficial economic impacts of spending by visitors staying at the proposed low-impact lodging. The Proposed Action would provide a new retail space to accommodate existing ocean recreation commercial activities. Increased visitation to Keauhou Bay is also anticipated due to improved amenities and the proposed low-impact lodging. It is expected that the KBMP would be beneficial to existing business at Keauhou Bay and the Hawai'i County economy overall.
Justify building more shops when there are empty shop spaces for lease nearby.	Cory (no last name provided)	The Project would provide additional space to accommodate existing businesses, therefore some of the additional retail space would have some built-in tenancy. Also, increased visitation to Keauhou Bay is anticipated due to improved amenities and the increased tourism associated with the new low impact lodging. The increased visitor spending in the area, associated with visitors to the new low impact lodging, would improve retail spending in the area and could potentially lead to increased retail occupancy at existing retail spaces outside of the project area. Additional information has been added to Appendix P on the anticipated economic benefits associated with visitor spending associated with guests of the proposed low impact lodging.
I think relocating the existing commercial vendors and adding limited small-scale vendors and kiosks could be appropriate for the space. If these provide opportunities for local and native businesses, then I would be supportive. If the businesses catered to both the community and visitors, then I would be supportive. I am not supportive of any development that is targeted for visitors only, I am only	Lillie Makaila	As indicated in Section 1.5 of the EIS, the Project would accommodate the relocation of two existing commercial operators from the bay front area, complementary retail uses, and potentially allow space for other tenants, which can include both local and native businesses. Furthermore, it is anticipated that both low-impact lodging visitors and local residents would attend project-

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
supportive of development that supports the local and native communities.		related amenities as current facilities utilized by residents would be improved and enhanced for community use.
Commercial & Recreational Tenant Selection - I would like to see more clarity on the criteria for use and tenant selection in commercial and recreational spaces. Priority should be given to tenants who have a low impact on the bay and are inclusive of indigenous customers/participants, rather than those with a high impact and culturally exclusive practices. The same low impact and culturally inclusive criteria should be applied to recreational tenants, favoring those who are sensitive to cultural considerations over those who are high impact and exclusive.	Kaleiolani Pasciuta	<p>All future tenants and operators within the Project Area will be vetted by Kamehameha Schools to align with the vision, management strategies, and values set forth in the KBMP. This includes commercial operators, retail tenants, ocean recreation service providers, and cultural education partners.</p> <p>Kamehameha Schools has not yet identified an operator for the proposed low-impact lodging. However, the KBMP provides the entitlements and strategic framework to support future partnerships, with any selected operator required to adhere to the principles and intent of the KBMP.</p>
This development will negatively impact a sacred place, residents, current business owners, and the magnificent marine life in the area.	M. Kekoa Aukai-Richardson	<p>As indicated in Section 4.1 of the DEIS, upon implementation of the Project's management goals, it is expected that cultural resources will be improved through preservation and stewardship measures and that opportunities for traditional practices will be expanded; thereby enhancing ancestral connection to place, and, the Project is anticipated to generate long-term benefits by preserving sensitive archaeological sites and implementing a long-term commitment and plan of appropriate stewardship.</p> <p>It is anticipated that upon completion of new retail space, existing commercial bayfront businesses would move their operations into newly assigned retail spaces (i.e., priority would be to existing tenants). The new facilities are expected to be beneficial to these businesses. Additionally, Appendix P indicates that there would be substantial economic benefits associated with the project, including new information on the beneficial impacts of spending by guests of the new low impact lodging.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<b>Retail</b>		
I DO NOT support additional retail activities. Keauhou Shopping Center serves as the area's retail hub. Until all the medical service providers leased space there, retail space sat empty for years. There is not a need for more retail.	Mary Cowen	The Project will provide additional space to accommodate existing businesses relocating from the bay front area, therefore some of the additional retail space would have some built-in tenancy. Also, increased visitation to Keauhou Bay is anticipated due to improved amenities and the new low-impact lodging. The increased visitor spending in the area, associated with visitors to the new low impact lodging, would improve retail spending in the area and could potentially lead to increased retail occupancy at existing retail spaces. Additional information has been added to Appendix P of the Final EIS on the anticipated economic benefits associated with visitor spending of guests at the proposed low-impact lodging.
<p>First off, we do not need another shopping/cultural center in the keauhou bay.</p> <p>The people of Kona have fought to protect their cultural cites, and you think they want housing and shopping in an area where the local ohana's already go, and could possibly loss or diminish access due to new development. We Do not support this nor will we ever support building down in Keauhou.</p>	Jakob Cox	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The KBMP does not include the establishment of new residential housing. The Project will provide additional space to accommodate existing retail businesses that will be relocated away from cultural sites at the bay.</p>
Keauhou shopping center is really just a 'small kine" local center, not at all geared to the high end outcome you seek,	Pamela Wang	The Project will provide additional space to accommodate two existing businesses that will need to relocate away from the bay.

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
especially with the outrageous rents charged there. Also consider the so called "disastrous" tourist season of 2024		New retail may space may be built to accommodate additional retail demand in the future. Additional information on the beneficial economic impacts of visitor spending of low-impact lodging guests has been added to Appendix P. Also, Additional information has been added as Section 3 of Appendix P of the Final EIS that indicates visitors to the area do appear to have declined from 2023 to 2024 though that is a decline from 2023 levels, which were the highest levels of visitation on record.
Socioeconomics & Environmental Justice		
The kids currently graduating from Kamehameha schools may never get to live and thrive in their ancestral lands because of development like this. And they all didn't go to a prestigious school to work at a resort that will pay them no more than 17\$ an hour which couldn't even find their rent let alone a future mortgage. And the unfortunate who couldn't afford Kamehameha or pass the requirements for admittance get an even shorter stick in all of this. Where's the development for the Hawaiian people? I don't even need to read the environmental impact because it's the big picture I'm looking at. That once again Hawaiians are selling out, that money is more important than the people. That tourism is more important than reconnecting with Hawaiian roots. Why not turn this area into a place that benefits people, feeds people, heals people, instead of a place that only heightens tensions, limits resources further and pushes Hawaii and it's people further from its heart.	Lindsey Caldwell	<p>As indicated in Section 2.2 of the EIS, the mission of Kamehameha Schools is to create educational opportunities in perpetuity to improve the capability and well-being of people of Hawaiian ancestry. Kamehameha Schools' Vision 2040 seeks to improve the well-being of 'āina (land) and the lāhui (Hawaiian people) within one generation. In that light, the lands bestowed upon Ke Ali'i Pauahi, and subsequently endowed to Kamehameha Schools, enhance a sense of Native Hawaiian identity by maintaining its ancestrally mandated obligations and responsibility to past, present, and future. Kamehameha Schools, as the Haku 'āina (proprietors of the land), has a responsibility to care for these legacy lands in a way that fosters the relationship between kānaka (humans) and 'āina, while also ensuring their long-term economic vitality to positively meet the needs of the communities the institution serves. To fulfill the mission, Kamehameha Schools seeks to utilize its landholdings and resources to achieve a balanced state between educational, cultural, environmental, economic and community returns. Kamehameha Schools recognizes that a thriving lāhui is not solely achievable through financial gains but is equally dependent upon the wellbeing of its learners, the greater community, and the 'āina as a whole.</p> <p>The KBMP is based on a framework established through extensive community engagement, it incorporates the foundational ideas of 'Ike Kupuna, Aloha 'Āina, Mālama and Kuleana, and it does so in a way that supports resilient economies, cultural landscapes, diverse learning, and career pathways. Because the Project is expected to provide extensive economic benefits to the community in a way</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		that would also improve heritage and cultural engagement, as indicated in Section 4.14 of the EIS, socioeconomic impacts are expected to be beneficial.
<p>Economical: Another Resort in this area will fail. Majority of Tourists head north of the Airport. Note the failed Resorts of the past in this area, Kahaluu in particular. What guarantee/demand does KSBE have that a resort development in this area will be successful in 15-20 years? KSBE track record for developing resort ready operations is not a sure success. In this case, the KSBE property has been poorly managed over a very long time. Now, Kamehameha Schools wants to justify this mismanagement by including a “hail mary” for income production, e.g. A Resort. A philosophy change at KSBE is needed, especially in these rural settings. Instead of Resort Thinking: What investment would benefit our graduating students the most? (hint, not a another resort). What investment would help stem the loss of talented young people from our island? What investment ensures a future, long term economic benefit? What investment is best for talent retention on the Big Island? Even, attract young talent from outside the Big Island. KSBE with its considerable resources should be a SOURCE of inspiration, research, and teaching. You have the connections to properly develop a longer thinking set of objectives for the Big Island. KSBE is based in Oahu, so it’s natural that it would focus its attention there. Yet, investment on the Big Island COULD be such that young people (our future) from Oahu, Maui, Kauai would WANT to move to the Big Island. As Ms. Harman at KSBE quoted that “change can be difficult”, changing KSBE’s mission to actually support its student by doing the right thing for the long term will perhaps be difficult for KSBE, but the right thing at this time. A resort does not provide an incentive for young talent to remain on the Big Island. Surely an entity like KSBE can imagine BETTER than the plan presented for Keauhou Bay improvements/development. Nor does a</p>	<p>Rollin Stonebraker-Soles</p>	<p>It is certainly true that the long-term success of any economic endeavor is never a certainty. Extensive community engagement has taken place to develop the conceptual framework for the KBMP. The Purpose and Need set forth in Section 2.7 of the DEIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and manage circulation and parking. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan’s implementation can be self-sustaining. Additional information has been added to Appendix P of the Final EIS on the anticipated economic benefits associated with visitor spending associated with guests of the proposed low-impact lodging.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
Resort improve the environmental health of this valuable cultural site.		
The Bay also clearly has historical significance and is a site which deserves recognition. In its present state, the Bay and its immediate surrounding area are heavily utilized already. I question the assumption that there is room for significant economic growth.	Tom Fetter	<p>As indicated in Section 1.4 of the EIS, the Project Area includes several historically significant places located along the base of 'Ahu'ula Cliff, including the birthplace of Kauikeaouli, marked by a commemorative plaque and remnants of Ho'okūkū Pond. The birth site is maintained through an agreement between Kamehameha Schools and the Daughters of Hawai'i, an eleemosynary corporation committed to historic preservation.</p> <p>Improvements to the Project Area, associated with the Proposed Action, are anticipated to increase utilization of the area due to the availability of improved facilities and access. Additional utilization, and associated economic benefits, are anticipated in association with new low impact lodging operations. Additional information on the economic impacts of visitor spending of low impact lodging guests has been added to Appendix P of the Final EIS.</p>
Volume I section 6.1 states: "Without comprehensive improvements, the Kamehameha Schools-owned properties would remain underutilized and underperforming financially". It might be helpful for those who oppose this development to understand that KS and the trustees are bound by the trust to financially increase the endowment for our lahui. I welcome those opposed to this development and KS to think outside the box and offer another avenue for these lands that will achieve the desired financial benchmark other than a commercial and resort development. Those opposed, please understand that without meeting this financial benchmark or offering some other source of educational or financial support, you are continuing to displace indigenous Hawaiians and taking away from our lahui.	Kaleirolani Pasciuta	<p>The KBMP aims to economically sustain the Keauhou Bay area by generating income from appropriate retail and lodging activities. These activities are intended to support long-term stewardship efforts, including the care, protection, and revitalization of the bay's cultural and natural resources. The revenue model is designed to align with Kamehameha Schools' broader mission to create educational opportunities in perpetuity and promote a thriving Native Hawaiian community. Income derived from these commercial uses will directly contribute to ongoing operations, cultural programming, and site maintenance within the project area.</p> <p>The EIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action. Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p>
The economics of this plan don't work: not for jobs, not for justice, not for financial return People of Hawaiian heritage are leaving the island at greater rates than any other ethnic	Alice Ray	Extensive community engagement has taken place to develop the conceptual framework for the KBMP. The Purpose and Need set forth in Section 2.7 of the DEIS indicates a need to strategically

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>group, Why? Wages for hospitality industry service workers are too low to make even modest housing affordable. A resort hotel and high end restaurant would perpetuate a business model that depends on low paying service jobs and would reinforce cultural stereotypes of Hawaiians as entertainment features and/or servants for more affluent visitors. Ownership of Hawaii hotels by private equity investment companies has gone from 4% twenty years ago, to 29% this year. 27% of hotels on this island are already owned not by hoteliers, but by investment companies, who use debt to acquire distressed properties (like the nearby Sheraton/Outrigger), rennovate them enough to jack up prices, then squeeze labor in the name of “operational efficiencies” at the expense of working conditions and the aloha spirit. All in order to flip the property to another debt-financed buyer, or refinance with more debt, used to pay off investors and raise rates again, but not raise up their workers. The competitive landscape for both workers and customers - for a high-end restaurant in this location is not good either. Two high end restauants within a quarter mile have failed. Economics haven’t work in the off season. Owners can’t afford to keep good help. Chef’s leave, making it hard to control quality. As for customers, a planned huge new Duke’s restaurant at the Outrigger (practically next door), with positive brand recognition, tested staff and a profitable business model, will open in 2025, taking significant market share. KS asserts the hotel/restaurant project is needed to finance their educational initiatives, but the numbers don’t work. It would need to generate \$5 million in operational profits each year just to match the cash return from keeping the proposed \$100 million investment (hotel and restaurant only) in a safe CD. But with the number of high end rooms (including VRBO) already exceeding visitors to fill them, risk is high. Transferring the risk to a management company increases pressure to maximize efficiencies at the expense of worker well-being,</p>		<p>reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and manage circulation and parking. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan’s implementation can be self-sustaining. Additional information has been added to Appendix P of the Final EIS on the anticipated economic benefits associated with visitor spending associated with guests of the proposed low-impact lodging.</p> <p>The project will generate an estimate of 2,619 construction jobs and sustain long-term employment in cultural education, hospitality, and retail. The project supports local businesses and entrepreneurs through vendor kiosks, retail spaces, and cultural education programs, ensuring economic benefits extend beyond just hospitality workers.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
often including loss of health care benefits, less secure paid hours, and loss of seniority.		
Commercial & Recreational Tenant Selection - I would like to see more clarity on the criteria for use and tenant selection in commercial and recreational spaces. Priority should be given to tenants who have a low impact on the bay and are inclusive of indigenous customers/participants, rather than those with a high impact and culturally exclusive practices. The same low impact and culturally inclusive criteria should be applied to recreational tenants, favoring those who are sensitive to cultural considerations over those who are high impact and exclusive.	Leiola Augustine	All future tenants and operators within the Project Area will be vetted by Kamehameha Schools to align with the vision, management strategies, and values set forth in the KBMP. This includes commercial operators, retail tenants, ocean recreation service providers, and cultural education partners.  Kamehameha Schools has not yet identified an operator for the proposed low-impact lodging. However, the KBMP provides the entitlements and strategic framework to support future partnerships, with any selected operator required to adhere to the principles and intent of the KBMP.
Section 2.6.2 claims: "Lands are Underperforming Economically" "The Kamehameha Schools properties are prime properties that could generate significant revenues from appropriate development to support the management of Kamehameha Schools assets and provide long-term economic returns. However, these lands are currently underutilized, and do not yield equitable returns or market-based rent revenues for the organization. A key component of the plan is to ensure its economic sustainability. Revenue generated from commercial lease rent will be redirected to support the KBMP's desired educational and cultural resource management priorities..." This assumption, that Keauhou Bay is a "prime property that could generate significant revenues," flies directly in the face of section 2.6.1:	Janet Matlock	Extensive community engagement has taken place to develop the conceptual framework for the KBMP. The Purpose and Need set forth in Section 2.7 of the DEIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and manage circulation and parking. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Additional information has been added to Appendix P of the Final EIS on the anticipated economic benefits associated with visitor spending associated with guests of the proposed low-impact lodging.
What kind of credibility can Native Hawaiian organizations have when they are placing more importance on monetary gain than on preserving a sacred place that holds value far beyond any dollar amount to Native Hawaiians themselves? Why should anyone listen to Native Hawaiians who say the cost of living here is too high, there's too much development	M. Kekoa Aukai-Richardson	As indicated in Section 2.2 of the DEIS, the mission of Kamehameha Schools is to create educational opportunities in perpetuity to improve the capability and well-being of people of Hawaiian ancestry. Kamehameha Schools' Vision 2040 seeks to improve the well-being of 'āina (land) and the lāhui (Hawaiian people) within one generation. In that light, the lands bestowed

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>and over-tourism when this is how one of our most well-known Hawaiian institutions is making decisions that betray those concerns, and in a sacred place nonetheless. I stand with Kupuna Kumu Lily Kong, a descendant of the area. Her wisdom and heritage should be honored by not moving forward with this plan.</p>		<p>upon Ke Ali'i Pauahi, and subsequently endowed to Kamehameha Schools, enhance a sense of Native Hawaiian identity by maintaining its ancestrally mandated obligations and responsibility to past, present, and future. Kamehameha Schools, as the haku 'āina (proprietors of the land), has an obligation to care for these legacy lands in a manner that fosters the relationship between kānaka (humans) and 'āina, while also supporting their long-term economic vitality to meet the needs of the communities the institution serves. To fulfill its mission, Kamehameha Schools seeks to utilize its landholdings and resources to achieve a balanced state between educational, cultural, environmental, economic and community returns. Kamehameha Schools recognizes that a thriving lāhui is not solely achievable through financial gains but is equally dependent upon the wellbeing of its learners, the greater community, and the 'āina as a whole.</p> <p>The KBMP is based on a framework established through extensive community engagement, it incorporates the foundational ideas of 'Ike Kupuna, Aloha 'Āina, Mālama and Kuleana, and it does so in a way that supports resilient economies, cultural landscapes, diverse learning, and career pathways.</p> <p>Kamehameha Schools owns 371,000 acres statewide; those lands are zoned and designated for different uses. Therefore, each property plays a different role in the larger portfolio. Kamehameha Schools does place importance on stewardship and agriculture as demonstrated by designating over 247,000 acres for conservation use and over 106,000 acres in agricultural production. The lands at Keauhou Bay are zoned for Resort use, therefore, Kamehameha Schools is proposing this economic use in alignment with the land use designation and the opportunity to generate appropriate scale income from these Resort zoned lands.</p> <p>Because the KBMP would provide extensive economic benefits to the community in a way that would also improve heritage and cultural engagement, as indicated in Section 4.14, socioeconomic impacts are expected to be beneficial.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Please explain the authority in the trust documents for KS to develop a hotel project to maximize profits at a major royal cultural site? Are there no impermissible business strategies in the KS 2025 strategic plan?</p> <p>As an alternative to a resort hotel, can't you monetize a royal cultural center designed to educate the public, children, tourists in a culturally and environmentally sensitive way and that would provide cultural jobs as opposed to housekeeping jobs?</p> <p>How many workers do you foresee employing?</p> <p>How many workforce housing units do you intend to build as part of this project?</p>	<p>Claudia Rohr</p>	<p>Kamehameha Schools owns 371,000 acres statewide; those lands are zoned and designated for different uses. Therefore, each property plays a different role in the larger portfolio. Kamehameha Schools does place importance on stewardship and agriculture as demonstrated by designating over 247,000 acres for conservation use and over 106,000 acres in agricultural production. The lands at Keauhou Bay are zoned for Resort use, therefore, Kamehameha Schools is proposing this economic use in alignment with the land use designation and the opportunity to generate appropriate scale income from these Resort zoned lands while also enhancing the stewardship of the cultural sites in the vicinity.</p> <p>As indicated in Section 2.2 of the EIS, Kamehameha Schools has an obligation to care for its legacy lands in a manner conducive to not just fostering this relationship between kānaka (humans) and 'āina but to also ensure their long-range economic vitality as to positively meet the needs of the communities the institution invariably serves. To fulfill its obligation, Kamehameha Schools seeks to utilize its landholdings and resources to achieve a balanced state between educational, cultural, environmental, economic and community returns.</p> <p>Kamehameha Schools, as a private Native Hawaiian landowner, retains the right to use the lands endowed by Princess Bernice Pauahi Bishop in a manner that supports its mission and organizational needs. These lands may be utilized to the highest and best use as permitted under applicable regulations. Kamehameha Schools recognizes that a thriving lāhui is not solely achievable through financial gains but is equally dependent upon the wellbeing of its learners, the greater community, and the 'āina as a whole.</p> <p>At the heart of the KBMP is the designation of a cultural heritage area that will serve as the piko, or spiritual and cultural center, for cultural and educational activities. This area honors the legacy of Hawaiian royalty and the historical importance of Keauhou Bay, and it is intended to be a gathering place where traditions can be celebrated and passed down. In shifting the bay's focus toward its</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>cultural heritage, the plan aims to reestablish Keauhou as a place of learning, respect, and connection.</p> <p>The KBMP is based on a framework established through extensive community engagement, it incorporates the foundational ideas of 'Ike Kupuna, Aloha 'Āina, Mālama and Kuleana, and it does so in a way that supports resilient economies, cultural landscapes, diverse learning, and career pathways. Because the Proposed Action would provide extensive economic benefits to the community in a way that would also improve heritage and cultural engagement, as indicated in Section 4.14 of the EIS, socioeconomic impacts are expected to be beneficial.</p> <p>The number of jobs that would be generated by the Project is provided in Section 4.14 and Appendix P of the EIS. The EIS estimates that there would be an estimated total of 2,619 jobs generated or sustained from Project construction and 169 jobs generated or sustained from project operations annually.</p> <p>Information on the size of the Hawai'i County construction industry, in terms of employment, has been added to Appendix P. Given the size of the local workforce as well as the timeframe and scale of construction, it is not anticipated that workforce housing would not be required. The construction work would primarily utilize on-island construction labor, though some construction workers from other islands (primarily O'ahu) would likely be needed for specialty trades work. Workers from other islands are expected to stay at lodging establishments near the Project Area, and dedicated workforce housing would not be required.</p>
<p>Section 4.14.2, Economic and Fiscal Impacts, discusses that 1,484 short term construction and project related jobs would be created by this proposal. Slightly more than 10% of that, 159 jobs, would be permanent jobs. That hardly seems like a trade-off for the community. That few new jobs for the physical disruption to the area, let alone the heartache for what this proposal intends to create?</p>	<p>Elizabeth Dunn</p>	<p>Section 4.14 of the EIS and Appendix P have been updated with revised construction job estimates, information on the size of Hawai'i Island construction industry in terms of employment, and additional details on construction timeline projections. Construction jobs tend to be classified as short-term because construction projects come to completion. As such, in order to maintain long-term employment, construction workers work on multiple projects over the course of time. Relatively large construction projects such as the Project do a great deal to support</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
Where are the short term workers coming from? What roads are they using? Will they be housed locally? Will a construction staging area be built for the parking for these workers as well as the storage of construction equipment?		<p>a steady stream of project work and therefore greatly improve the chances that a particular construction worker can maintain long-term steady employment. Long term steady employment for construction workers ensures that the workers earn incomes for themselves and their families and generates personal spending in the local economy (as illustrated by construction related induced economic impacts). Furthermore, larger construction projects, which improve the chances for construction workers to maintain steady employment, allow for stability in the local construction industry. Stability in the local construction industry reduces the likelihood that off-island construction firms and employees are needed for construction work and therefore allowing benefits to stay on-island and limiting potential adverse effects related to visiting workers.</p> <p>Construction would take place over a number of years. Given the size of the local workforce as well as the timeframe and scale of construction, it is anticipated that workforce housing would not be required. The construction work would primarily utilize on-island construction labor, though some construction workers from other islands (primarily O’ahu) would likely be needed for specialty trades work. Workers from other islands are expected to stay at lodging establishments near the project site and dedicated workforce housing would not be required. Furthermore, it is anticipated that construction staging and parking would take place within the Project Area.</p> <p>Appendix P has been updated with estimates of economic impacts from visitor spending. Jobs generated from visitor spending are typically classified as long-term or permanent.</p>
<b>Affordable Housing Demand</b>		
Local Housing Needs: The focus on high-end vacation rentals and other revenue generating developments is exactly what the Keauhou community does not need.	Bryce Groark	The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The Project does not involve the development of new residential housing units. The additional jobs and incomes associated with the Project would contribute to residents' ability to pay for housing needs. A housing alternative is considered in the EIS however, housing uses would require more parking and infrastructure demands than low-impact lodging uses and would thereby result in increased traffic-related impacts and potentially utility demands. Due to the location and topography, the construction of housing units would be comparatively much more expensive to build, limiting their affordability for local residents in the region. Table 6-1 of the EIS provides a detailed evaluation of the Housing Alternative.</p>
And how does this plan for luxury dwellings correspond to the need for affordable housing in the area?	Michael Hanly	<p>The Project does not involve the development of new residential housing units. The additional jobs and incomes associated with the Project would contribute to residents' ability to pay for housing needs. A housing alternative is considered in the EIS however, housing uses would require more parking and infrastructure demands than low-impact lodging uses and would thereby result in increased traffic-related impacts and potentially utility demands. Due to the location and topography, the construction of housing units would be comparatively much more expensive to build, limiting their affordability for local residents in the region. Table 6-1 of the EIS provides a detailed evaluation of the Housing Alternative.</p>
The addition of even more resorts only increases the issues of affordability for local Hawaiians and residents who	Lisa Sterritt	<p>Increased visitation to Keauhou Bay is anticipated due to improved amenities and the increased tourism visitation that would be associated with the proposed low impact lodging. It is expected</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
struggle with housing, high energy costs and goods and services priced out of their reach.		that the KBMP would be beneficial to existing business at Keauhou Bay and the Hawai'i County economy overall. Updated economic impact information has been added to Section 4.14 and Appendix P of the Final EIS to include new information on the beneficial economic impacts of spending by visitors staying at the proposed low impact lodging. The Project is not anticipated to impact the affordability of housing in the region, however, the additional jobs and incomes associated with the Project would contribute to residents' ability to pay for housing needs.
<b>Medical Facilities</b>		
Current and added capacity of the proposed development on existing medical facilities unassessed The DEIS provides a list of medical facilities near this proposed development, yet fails to provide any substantive analysis of how population increases will impact existing medical facilities. Kona is in dire need of a second hospital and upgrades to the existing facility. Identifying them as a medical facility is not an assessment. Identifying additional facilities that the existing community relies on like Urgent Care and West Hawaii Community Health Center is also inadequate. These are primary care facilities for our 'ohana on the west side. The DEIS fails to assess how added population will add stress to these existing facilities. It is so careless to assume that there will be no impact and that listing them is enough; it is not. 'Ohana already wait hours if not days to get into these overloaded facilities. Have some decency and get it together. Provide a thorough analysis. Listing medical facilities by name is not an analysis, it's a list. I have the following questions: What is the current capacity of medical facilities listed in the DEIS? How will the proposed project impact the carrying capacities of the medical facilities listed as available? What is the assessment of impacts of population on the West Hawai'i medical facilities?	Loke Aloua	<p>Additional information on anticipated impacts to medical services has been added to Section 4.9.2 of the Final EIS. A less than significant impact to medical services is anticipated in association with visitor population at the proposed low-impact lodging.</p> <p>An analysis of the proposed Project's potential impact on the local healthcare system suggests that it would not significantly exacerbate existing challenges. The proposed low-impact lodging with an estimated population of 250 guests at any given time (based on 150 rooms with an average occupancy of 2.25 people per room at a 74% occupancy rate), is expected to place minimal additional demand on West Hawai'i's medical facilities.</p> <p>The low intensity and limited scale of the Project's operational profile are not anticipated to substantially impact the availability of medical resources in the area, as the relatively small increase in transient population is unlikely to drive considerable demand for local health services.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<b>Biological Resources</b>		
<p>Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Shoals to develop their bungalow project, because it is proven that developments will ALWAYS have rain runoff that will pollute the bay constantly during development and after. If you allow this bay to be development you will be allowing all types of marine life to die and there is NO WAY to stop this from happening because runoff water from development can't be stopped. It is what happens in ALL coastal developments. Development of Keauhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this will cause the manta ray food source to disappear. This will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on this tour to survive. Reason #2 a Resort Development WILL Kill Marine Life The manta rays go to Keauhou Bay every night to eat zooplankton and if you allow this development that WILL have runoff water, you WILL be causing zooplankton to be seriously affected. Reason #3 a Resort Development WILL Increased Human Traffic In Keauhou Bay Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. If you allow this resort to be developed, you will be destroying the coral reefs in the bay because this bay is extremely small and used by a lot of locals already for fishing, canoing, swimming, snorkeling, paddle boarding, surfing, boating...it can't afford more use by many thousands more people yearly. A resort development will damage Keauhou Bay coral and marine life and, Big Island resources and infrastructure are currently being negatively affected from the development that is on island already, and there are years of new development that have already been</p>	<p>Sarah Dahm                      Melanie Diehl                      Claudia Kane                      Rebecca Melendez                      Heather Tribolet</p>	<p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term. EIS Section 4.5 discusses Project stormwater management and drainage improvements.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p> <p>The Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The Project's detailed drainage analysis and design will require design review and approval by the County for land use and</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>approved, before having safe resources and infrastructures for new developments. With these scientifically proven articles by some of the most professional scientists in the world, they say the a serious population increase, as well as development and resort runoff that happens because of parking lots, and... with all coastal developments, it will be dangerous for Keauhou Bay to be development because it will damage the marine ecosystems in the area. Please, save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools because all of these articles prove it would be extremely damaging to the waters at Keauhou Bay.</p>		<p>construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area.</p> <p>The KBMP is intended to enhance shoreline access to Keauhou Bay, providing users with improved entry to public recreational areas and the ocean. While Kamehameha Schools does not have jurisdiction over the enforcement of marine wildlife interaction regulation, it may contribute to ocean conservation through educational initiatives and strategically placed signage.</p>
<p>Also, I feel your plan is cramming so much activity around the bay that it will lose whatever charm is left of it. The bay used to be alive with a'ama, wana, coral and a lot of fish and other waterlife. Now it looks like an underwater desert with dusty sediment and nothing of the glorious sea life that thrived.</p>	<p>Booey Hodgins Garcia</p>	<p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
<p>The coral all over Hawai'i has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all Aquatic life there, and even the Manta Rays that go there every night to eat</p>	<p>Rebecca Meledez Sarah Dahm Melanie Diehl</p>	<p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>zooplankton from the Manta Ray tours at night, and eat it during the day as well because they need to eat 5 times their body weight in zooplankton daily. If you allow this bay to be development you will be allowing all types of marine life to die and there is NO WAY to stop this from happening because runoff water from development can't be stopped. It is what happens in ALL coastal developments. Reason #2 a Resort Development WILL Kill Marine Life The manta rays go to Keauhou Bay every night to eat zooplankton and if you allow this development that WILL have runoff water, you WILL be causing zooplankton to be seriously affected because as this article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem... Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton.</p> <p>The development of Keauhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this will cause the manta ray food source to disappear. This will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on this tour to survive. This occurred in a relatively</p>	<p>Claudia Kane                      Heather Tribolet                      Donna Cherrier</p>	<p>term. EIS Section 4.5 discusses Project stormwater management and drainage improvements.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p> <p>The Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The Project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival"</p> <p>If you allow Keauhou Bay to be development there will be a higher population in the bay and that will hurt the coral in the bay as well, because it's known that "Denser coastal populations...will lead to reef degradation by coastal constructions. Denser populations inland will lead to more runoff and situations... Reason #3 a Resort Development WILL Increased Human Traffic In Keauhou Bay Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regards to the serious threat posed to coral reefs by humankind's continued numerical increase." "This is how tourists are destroying coral reefs in Hawaii The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment – especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." If you allow this resort to be developed, you will be destroying the coral reefs in the bay because this bay is extremely small and used by a lot of locals</p>		<p>DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area.</p> <p>The KBMP is intended to enhance shoreline access to Keauhou Bay, providing users with improved entry to public recreational areas and the ocean. While Kamehameha Schools does not have jurisdiction over the enforcement of marine wildlife interaction regulation, it may contribute to ocean conservation through educational initiatives and strategically placed signage.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>already for fishing, canoing, swimming, snorkeling, paddle boarding, surfing, boating...it can't afford more use by many thousands more people yearly. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species."</p>		
<p>I do not want any development of Keauhou Bay. It will damage the ecosystem and destroy our manta rays.</p>	<p>Amanda Vincent</p>	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.</p> <p>The DEIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action. Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p>
<p>We need to protect our island. We don't need more concrete or vacation places. We need to save our corals, and sea life. Not make it a Disneyland for the rich. You are suppose to have the people's welfare not your paycheck as a factor. Do the environmental research!!!</p>	<p>Candi Baker</p>	<p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.
Explain how erosion will be prevented after trees are cut down.	Cory (No last name provided)	<p>EIS section 4.3 discusses erosion impacts. Project related construction activities such as clearing, grading, and excavation during phased development may cause minor short-term soil erosion. Efforts will be made to balance cut and fill to reduce the need for material import or export.</p> <p>Required permits from the County Department of Public Works and a National Pollutant Discharge Elimination System (NPDES) permit from the State will be obtained. Best Management Practices (BMPs) will be used to manage erosion and sedimentation, including sediment basins, silt fences, and dust control measures. Upon completion, landscape plantings and permanent sediment controls will stabilize the site. The Project is not expected to cause long-term significant impacts to geology or topography.</p>
Existing And Future Impacts On The Coral In The Bay Are Ignored The USEPA considers sedimentation, pollutants and nutrients to be some of the primary threats to coral communities. A healthy coral community is key to maintain a healthy aquatic environment. The status of the health of the coral reefs within Keauhou Bay and the impact of existing sedimentation, toxics and nutrients has not been assessed. Current impacts from Project proponent's properties to the health of the coral reefs has not been studied nor assessed. The EIS fails to quantify the potential amount of sediment, pollutants and nutrients that may be generated from its construction activities nor from the Project. The EIS analyzes no potential mitigation measures that may be adopted to address past and current impacts to the bay from Project proponent's properties nor future impacts to the bay from the Project. As a result, the EIS is facially deficient and rejected so that the appropriate studies of the baseline conditions of the bay are studied and future project impacts are assessed and appropriate mitigation measures adopted to ensure the health of Keauhou Bay.	Jeff Caufield	<p>The EIS notes that the 2020 State of Hawai'i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>A significant number of non-Kamehameha Schools properties in the vicinity of Keauhou Bay remain on cesspool systems. The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean. Further study will be needed to determine if any capital improvements of the He'eia Waste Water Reclamation Facility WWRF or facilities leading up to it will require improvements with the KBMP's projected increase in flow. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality and marine life. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>The existing Project Area lacks active management and does not contain infrastructure to capture or treat stormwater, resulting in untreated runoff that may flow toward the ocean. With implementation of the Project, drainage improvements and best management practices will be introduced to capture and treat runoff on site. These measures will reduce the potential for stormwater-related impacts, improving current conditions.</p> <p>The Project will be constructed entirely on land and does not include any direct discharges to coastal waters. As a result, water quality conditions in Keauhou Bay are not expected to worsen and may improve through reduced sediment and pollutant loading.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area.</p>
<p>To whom it may concern, Heavy storms can come in and serious toxins from the golf course are able to run into Keauhou Bay causing Algae Blooms and Sea Foam, even with the best filter that is trees and land because at times tropical storms are more than any land can absorb. This doesn't happen that often but if you allow this Bungalow Resort development in Keauhou bay, algae blooms and sea foam will happen more often because fertilizer, pesticides, waste...will be allowed to runoff into the bay because the natural pollution filter, the trees and land will be gone and pavement can't hold as much runoff as the natural trees and land. "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location. This is not that often because the natural trees and land hold most of the toxic pollution from the golf course back when it rains. Also, The Green Sea Turtle is protected</p>	<p>Rebecca Melendez</p>	<p>The EIS notes that the 2020 State of Hawai'i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>A significant number of non-Kamehameha Schools properties in the vicinity of Keauhou Bay remain on cesspool systems. The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean. Further study will be needed to determine if any capital improvements of the He'eia Waste Water Reclamation Facility WWRF or facilities leading up to it will require improvements with the KBMP's projected increase in flow. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124. "Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." ENDANGERED SPECIES CONSERVATION Endangered Species Act " Section 2. Findings, Purposes, and Policy (4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to— (b) PURPOSES.— The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved , to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section." The word in the very Endangered Species Act states, "to conserve" and conserving the endangered species that enter into Keauhou Bay would be to NOT DEVELOP A BUNGALOW RESORT because this would cause serious runoff that would pollute the bay and endanger these already endangered species the green sea turtle and the monk seal." §195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." Please, see that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay would threaten endangered species due to the unavoidable pollution runoff that would happen a lot more</p>		<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality and marine life. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
often due to taking out the natural pollution filter, that is the trees and the land.		While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area.
Pleaes reject Kamehameha Schools EIS because Keauhou Bay is declared Impaired water HI713293 by the EPA Clean Water Act. This bay needs to be preserved because it is a natural resource that is very sensitve. "The State of Hawaii Conservation District is a designated land area managed by the Department of Land and Natural Resources (DLNR) through the Office of Conservation and Coastal Lands (OCCL). This district was established to protect Hawaii's natural resources and encompasses various land types including watersheds, scenic areas, parklands, wilderness areas, beach reserves, and habitats for endemic plants and wildlife. The Conservation District also includes submerged lands makai of the shoreline." Keauhou Bay is a natural resource and NEEDS TO BE PROTECTED. Under the EPA Clean Water Act it is Impaired water area and DLNR it should be conserved because it is an extremely sensitive area. <a href="https://dlnr.hawaii.gov/occl/conservation-district/">https://dlnr.hawaii.gov/occl/conservation-district/</a> The district is divided into five subzones: Protective: The most environmentally sensitive areas. Limited: Areas with some environmental sensitivity. Resource: Areas designated for resource conservation. General: The least environmentally sensitive areas. Special: Areas with unique land uses	Rebecca Melendez	<p>The EIS notes that the 2020 State of Hawai'i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution. Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.	Rebecca Melendez Donna Cherrier Robert Gay	<p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweed and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs." The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks</p> <p>If you allow this resort the amount of people in this bay will fully increase and, "Hawai'i's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration."</p>		<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>The KBMP is intended to enhance shoreline access to Keauhou Bay, providing users with improved entry to public recreational areas and the ocean. While Kamehameha Schools does not have jurisdiction over the enforcement of marine wildlife interaction regulation, it may contribute to ocean conservation through educational initiatives and strategically placed signage.</p>
<p>Keauhou Bay already has one large hotel and numerous other rental housing units adjacent to its shore. The small bay already has a very high level of human use. Adding another hotel to the bay area will greatly increase the level of human use to a point that further damage to the corals and other marine life will be inevitable.</p>	Jeffrey Malison	<p>It is not always the case that development inevitably leads to pollution of nearby ocean waters and impacts to marine life. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term.</p> <p>The KBMP is intended to enhance shoreline access to Keauhou Bay, providing users with improved entry to public recreational areas and the ocean. While Kamehameha Schools does not have jurisdiction over the enforcement of marine wildlife interaction regulation, it may contribute to ocean conservation through educational initiatives and strategically placed signage.</p>
<p>A boutique hotel would wipe out what is currently a lush, verdant green space leading down to the Bay, which is acting as a buffer for run-off and other pollutants. There is already enough development in the area; we need to preserve whatever green we can.</p>	Mary Kealoha Campbell-Droze	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Currently, the portion of the Project Area between 'Ahu'ula cliff and the golf course is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or erosion control benefits. The Project does not propose the removal of native forests.</p> <p>With the implementation of the Project, native landscape plantings and active land management will help stabilize soils at the Project Area.</p>
<p>Hawaiian coral reefs are culturally, economically, and ecologically important, and have been identified as hotspots of coral resilience (Sully et al. 2022). However, coral cover in the state of Hawai'i has declined over the past few decades (Rodgers et al. 2015; Asner et al. 2022), due in part to chronic impacts from nearshore development. A recent study focused on coral reefs in Kona found that reefs with healthy fish populations and reduced exposure to wastewater and urban runoff were better able to recover after bleaching events than reefs exposed to elevated land-based impacts (Gove et al. 2023). This matches other findings from elsewhere in the Pacific (Donovan et al. 2021), which have consistently found a negative impact of elevated nutrients and wastewater on corals, especially as they struggle to adapt to bleaching events and other climate impacts.</p>	<p>Orion McCarthy</p>	<p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay. Improved water quality will help support healthy coral communities.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Coral colonies within and out of the Bay are in critical condition. I thought we were all concerned and wanted to enact uses that benefit re-growth of this valuable habitat? How does KSBE’s development fit with its Natural World cultural mission? Afterall, the humans historically inhabiting this region depended on a rich natural resource. KSBE cannot separately honor this area’s human history without doing the same in similar manner the natural wonder that once existed here.</p>	<p>Rollin Stonebraker-Soles</p>	<p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p> <p>The project’s stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay’s water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay. Improved water quality will help support healthy coral communities.</p>
<p>We applaud your efforts to raise and maintain funds for your Kamehameha Schools foundation, but more development at Keauhou Bay is not the answer. You must realise that the financial benefit would merely be short-term and that the long-term consequences would be dire - inter alia irreversible environmental damage, loss of native flora and fauna on land and sea, the local people's peaceful enjoyment of swimming, sailing, canoeing, volleyball will be lost. There are much better ways to manage your finances, please do not fall into the trap of the big real estate developers who are often motivated by self-interest.</p>	<p>Theresa Coe</p>	<p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p>
<p>Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a serious negative impact in Keauhou Bay and the surrounding community.</p>	<p>Diane Mistler</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>
<p>Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after. The fertilizers and pesticides alone will drain down into the ocean and have a serious impact on the fish and flora. Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff." The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," shares that the golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are being held off from running into the Bay by the very trees you want to take down. Let's not forget the marine life that will be</p>	<p>Diane Mistler</p>	<p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term. EIS Section 4.5 discusses Project stormwater management and drainage improvements.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p> <p>Kamehameha Schools acknowledges the potential for runoff from the golf course (not owned by Kamehameha Schools) located mauka of the Project Area during heavy rain events. Fertilizers and other nutrient pollutants can be harmful to coastal marine environments by promoting algae growth, which can disrupt marine ecosystems.</p> <p>Currently, the portion of the Project Area between 'Ahu'ula cliff and the golf course is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or erosion control benefits. The Project does not propose the removal of native forests. With the implementation of the Project, native landscape</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>threatened by excess pollution and traffic. Keauhou Bay is the monk seals and the green sea turtle’s habitat. More pollution and people will endangered these species. This Bay is one of the treasures we still have and worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is. Once it is gone it is impossible to get it back!!!</p>		<p>plantings and active land management will help stabilize soils at the Project Area.</p> <p>The Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project’s detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai’i.</p> <p>The KBMP is intended to enhance shoreline access to Keauhou Bay, providing users with improved entry to public recreational areas and the ocean. While Kamehameha Schools does not have jurisdiction over the enforcement of marine wildlife interaction regulation, it may contribute to ocean conservation through educational initiatives and strategically placed signage.</p>
<p>Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small bay, and</p>	<p>Alexandra Bernstein</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>the added footprint of a 105 room Resort will clearly include traffic excess to what current users &amp; the land support. It will have a serious negative impact in Keauhou Bay.</p> <p>You are hoping in vain if you think that dropping a resort for hundreds of guests &amp; employees will not overwhelm this small area with waste &amp; damage of the shoreline through overuse. Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.</p>		<p>place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
<p>aloha, i am writing today as a concerned resident in kona. There is no question that there is substantial data to show the negative and ongoing effects of a golf course and development on the marine life- our most valuable and precious resource here on hawaii island. there are many ways that the community can create important income streams for the kamehameha schools, especially on land already owned.</p>	Brianna Leever	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
<p>The Project proposes to remove acres of forest to construct a resort comprised of 43 homes with 150 bedrooms, build a new road connecting the north and south ends of the bay, build commercial kiosks, construct a cultural center and construct a commercial/retail center on the eastern end of Keauhou Bay. As you and the State of Hawaii are aware, coral, fish and other flora and fauna can be particularly susceptible to harm from excess sediment, toxic pollutants and nutrient loading in shallow bays like Keauhou Bay. In order to determine what the potential ecological impacts to Keauhou Bay are, at minimum the past studies cited should be reviewed to determine if shoreline communities are potentially affected by the current level of development and sedimentation/nutrient impacts apparent at Ho'okuku Pond ("KBOM DEA, Feb 2016" was cited vaguely in the text as a bay-wide assessment, but was not included in the DEIS references, nor in Appendices F or G). The 2016 study might be appropriate to consider as a baseline study, which is particularly important to assess conditions and impacts (see Rogers 1990). In this case, the 2016 study could be reviewed to consider the spatial distribution of coral cover (for example), and additional assessments might be undertaken at a similar intensity to those prioritized for Ho'okuku Pond (Table 4-9). Surveys before development</p>	<p>Nicholas Buhbe</p>	<p>The EIS notes that the 2020 State of Hawai'i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>A significant number of non-Kamehameha Schools properties in the vicinity of Keauhou Bay remain on cesspool systems. The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean. Further study will be needed to determine if any capital improvements of the He'eia Waste Water Reclamation Facility WWRF or facilities leading up to it will require improvements with the KBMP's projected increase in flow. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p> <p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>should be undertaken (to confirm 2016 conditions), after the development activity is complete (to assess impacts from grading, concrete pouring, road construction, etc.), and thereafter on a periodic basis (to evaluate impacts of the cumulative 'built-out' conditions). Additional study elements might include analysis of the health of the coral, an assessment to determine what the historical sedimentation rate is within the bay, quantify pollutants and nutrients within sediments or groundwater flowing into the bay, a bacteriological assessment, and identifying potential sources of impacts. Such a study should include a comparison of Keauhou Bay conditions to a nearby reference site to determine the relative degree of environmental change over time (or lack thereof). The study should analyze the potential impacts from the development, and analyze what mitigation measures, if any, might be needed to protect recreational users of Keauhou Bay as well as sensitive flora and fauna within the bay (including coral and fish populations) prior to or during construction, or if additional measures are necessary for various development components. For example, the questions: "What acreage of infiltration basins are necessary to accommodate runoff from X acres of impervious surfaces?" and "Will additional groundwater flows result in worse water quality in a restored Ho'okuku Pond or along the Keauhou Bay recreational shoreline?" might be addressed. Such studies would not only inform the public and regulatory agencies of the project impacts, but also inform the design of potential mitigation measures. Depending on the results of initial studies, alternative levels of development and/or mitigation measures might be evaluated. However, without the foregoing analysis, it is nearly impossible to determine the extent of project impacts on Keauhou Bay marine resources</p>		<p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p> <p>The existing Project Area lacks active management and does not contain infrastructure to capture or treat stormwater, resulting in untreated runoff that may flow toward the ocean. With implementation of the Project, drainage improvements and best management practices will be introduced to capture and treat</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>runoff on site. These measures will reduce the potential for stormwater-related impacts, improving current conditions.</p> <p>The Project will be constructed entirely on land and does not include any direct discharges to coastal waters. As a result, water quality conditions in Keauhou Bay are not expected to worsen and may improve through reduced sediment and pollutant loading.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area</p>
<p>Please do not allow Kam Schools to put a resort in Keauhou bay. We have plenty of resorts and hotels in Hawaii. We need to halt any new resorts and focus on preserving the precious natural resources of hawaii and make safe sustainable access to these natural wonders for local residents and visitors to enjoy with respect. That does not require more resorts. There are plenty of places for visitors to stay. Please protect this bay and do not develop it.</p>	<p>Rebecca Corby</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>
<p>While I acknowledge and agree with the need for reorganization of existing infrastructure and activities, and the potential economic benefits of this project, I have significant concerns regarding the environmental and social impacts of the proposed bungalow resort, particularly related to water usage and environmental protection.</p>	<p>Alexis Kerver</p>	<p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p> <p>Section 4.12 of the EIS includes detailed evaluations of the existing infrastructure capacities at Keauhou Bay, such as water, wastewater, solid waste, power, and telecommunications, along with potential impacts, and the necessary upgrades to support the KBMP.</p> <p>The EIS includes analysis to verify that Hawai'i Island's infrastructure systems can accommodate the proposed KBMP. The Project is designed to mitigate potential impacts on local resources through strategic planning, infrastructure upgrades, and sustainable design practices. With the implementation of these actions, the Project is anticipated to contribute positively to the region's growth while minimizing adverse impacts on the island's resources and infrastructure.</p>
<p>There will be more traffic, resort housing that does not help alleviate the affordable housing crisis on the island, excess commercial space, and permanent negative impacts on the land and sea. Once lost this is unlikely to be regained.</p>	<p>Laurel Terry</p>	<p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p> <p>The Project does not involve the development of new residential housing units. The additional jobs and incomes associated with the Project would contribute to residents' ability to pay for housing needs. A housing alternative is considered in the EIS however, housing uses would require more parking and infrastructure demands than low-impact lodging uses and would thereby result in increased traffic-related impacts and potentially utility demands. Due to the location and topography, the construction of housing units would be comparatively much more expensive to build, limiting their affordability for local residents in the region. Table 6-1 of the EIS provides a detailed evaluation of the Housing Alternative.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>But a more likely outcome is more stores, more congestion, more strain on water resources, and less access to the beautiful Bay.</p>	<p>Howard Warshaw</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan’s implementation can be self-sustaining. Long-term management of the bay’s natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>
<p>Impacts to Keauhou Bay from increased users unassessed. This proposed project will be increasing user density of the area. The impacts of this increased user density on Keauhou Bay should be assessed. It is ridiculous to propose this development which is directly seaside without having any safety measures in place for the biodiversity of the bay. This includes consideration for endangered and non-endangered species both terrestrial and marine. This project is premised by the assumption that this development will improve the area, yet it fails to actually consider the ecosystem of the Keauhou Bay, how ridiculous. It is so shameful to bring this type of project in and not actually consider the impacts to the bay and the marine life. How shame. More than 400 pages written with fancy graphs, pictures, and headings then no analysis on the impacts to the bay. KS will be responsible for bringing hundreds to thousands more people to Keauhou Bay. Where is the accountability for the health of the place? The impacts are beyond those of the project site. This old school all I gotta do is look at the boundaries of the land I like develop is pau. There are impacts beyond that need to</p>	<p>Loke Aloua</p>	<p>The proposed low-impact lodging component of the KBMP is intentionally located away from the shoreline to minimize its physical and visual impact on the bayfront. It is sited over 350 feet away from the shoreline and mauka of Old Kona Road above ‘Ahu’ula Cliff, placing it well outside the immediate bayfront area. This location helps preserve the integrity of the cultural landscape and allows the bayfront to remain focused on cultural, recreational, and community-oriented uses.</p> <p>An analysis of the proposed Project’s potential population impact suggests that it would not significantly impact coastal ecosystems. The proposed low-impact lodging with an estimated population of 250 guests at any given time (based on 150 rooms with an average occupancy of 2.25 people per room at a 74% occupancy rate), represents a relatively small increase. This limited scale of visitor accommodation is not expected to significantly affect marine life, as not all guests will use the bay simultaneously.</p> <p>Although Kamehameha Schools does not regulate marine wildlife interactions, it has committed to promoting ocean conservation through education and signage. Kamehameha Schools is</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>be assessed. I have the following questions: What exactly are the impacts of these populations on the marine ecosystem? What are these impacts to traditional and customary users of this space? Where is the Ka Pa’akai Analysis to assess these impacts and mitigation? How will the proposed development and added users impact marine species? What is the cumulative impact of the development on Keauhou Bay?</p>		<p>committed to continued collaboration with the Department of Land and Natural Resources to explore future marine stewardship strategies.</p> <p>Additionally, the Project includes a comprehensive stormwater management system, discussed in Section 4.5 of the EIS. This system is engineered to treat and retain runoff on-site, significantly reducing pollutants entering the bay. These measures are anticipated to have beneficial effects on water quality and marine resources.</p> <p>The KBMP is structured to reorganize land uses in a way that protects sensitive cultural sites and fosters a deeper connection between visitors and the land through cultural and educational programming. By relocating commercial activities away from sacred and historically significant areas, the plan preserves cultural spaces and reduces conflicting uses.</p> <p>EIS Section 4.1.1 analyzes the impacts to cultural resources and practices including a discussion of the Ka Pa’akai process. Upon implementation of the Project’s management strategies, it is expected that cultural resources will be improved through preservation and stewardship measures and that opportunities for traditional practices will be expanded; thereby enhancing ancestral connection to place.</p> <p>EIS Section 4.16.1 discusses Cumulative Impacts. The Project’s sustainable tourism model is expected to generate beneficial cumulative impacts by fostering a respectful and reciprocal interaction between visitors, local communities, and the natural and cultural resources of Keauhou. The coordinated development approach, compliance with infrastructure standards, and careful resource management within the framework of county and community development plans mitigate potential impacts. Kamehameha Schools will continue to work with local utilities and agencies to address any further needs, ensuring that the infrastructure demands from these combined projects are effectively managed and aligned with regional growth projections.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Keauhou Bay is already stressed, to the detriment of marine life. Those who use Keauhou Bay know not to enter it with an open cut, which is a sad reversal from when Native Hawaiians and others would seek out ocean saline water to heal wounds. Studies show Keauhou Bay water has high, if not the highest, levels of fecal bacteria along the Kona Coast. We know development and paving over more areas for buildings and parking increases runoff, which causes further water degradation. Increased development under this Plan undermines our ability to rejuvenate a healthy bay, also undermining key relationships among land, ocean, and people.</p>	<p>Peter Matlock</p>	<p>The EIS notes that the 2020 State of Hawai'i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>A significant number of non-Kamehameha Schools properties in the vicinity of Keauhou Bay remain on cesspool systems. The Project, however, will manage wastewater by directing all generated wastewater through a new sewer main along Old Kona Road. This main will connect to the existing sewer infrastructure, allowing for proper treatment and reducing the potential for pollutants to reach the ocean. Further study will be needed to determine if any capital improvements of the He'eia Waste Water Reclamation Facility WWRF or facilities leading up to it will require improvements with the KBMP's projected increase in flow. EIS Section 4.12.2 discusses wastewater treatment and disposal.</p> <p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p>
<p>The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keauhou Bay and "The Endangered Species Act of 1973 (ESA or "The Act"; 16 U.S.C. § 1531 et seq.) is the primary law in the United States for protecting and conserving imperiled species. Designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President Richard Nixon on December 28, 1973. The Supreme Court of the United States described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation".[1]"</p> <p><a href="https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973">https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973</a> 18 This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side</p>	Michael Hanly	<p>The KBMP is designed to reorganize the uses and activities within the bay to better reflect the cultural significance of the area and to support a more harmonious relationship between users, place, and purpose. Central to this reorganization is the concept of directing new growth to appropriate areas while preserving others, ensuring that future development does not come at the expense of cultural integrity or environmental health. To resolve long-standing conflicts between incompatible uses, the KBMP proposes relocating certain commercial operations, particularly those that are currently situated near sensitive cultural sites, to more suitable areas above the 'Ahu'ula cliff and along Kaleiopapa Street. By moving these uses away from the bayfront and heritage zones, the plan protects sacred spaces and allows for cultural practices to thrive without interference.</p> <p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>and a natural treasure like Keauhou Bay on the other. This land MUST be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come. In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved. These issues MUST be solved before considering another resort development on Big Island. We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay. The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is NOT suitable for this kind of development for both environmental and infrastructure reasons. The cost of what stands to be lost is far too high to allow this to happen. Please save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.</p>		<p>measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project Area, surface runoff generally does not occur in the typical rainfall occurrence. As a result, the Project Area does not contain any visible natural gulches or waterways. Runoff typically either percolates into the underlying groundwater or evaporates into the atmosphere.</p> <p>Kamehameha Schools acknowledges the potential for runoff from the golf course (not owned by Kamehameha Schools) located mauka of the Project Area during heavy rain events. Fertilizers and other nutrient pollutants can be harmful to coastal marine environments by promoting algae growth, which can disrupt marine ecosystems.</p> <p>Currently, the portion of the Project Area between 'Ahu'ula cliff and the golf course is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or erosion control benefits. The Project does not propose the removal of native forests. With the implementation of the Project, native landscape plantings and active land management will help stabilize soils at the Project Area.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>Section 4.12 of the EIS includes detailed evaluations of the existing infrastructure capacities at Keauhou Bay, such as water, wastewater, solid waste, power, and telecommunications, along with potential impacts, and the necessary upgrades to support the KBMP.</p> <p>The EIS includes analysis to verify that Hawai'i Island's infrastructure systems can accommodate the proposed KBMP. The Project is designed to mitigate potential impacts on local resources through strategic planning, infrastructure upgrades, and sustainable design practices. With the implementation of these actions, the Project is anticipated to contribute positively to the region's growth while minimizing adverse impacts on the island's resources and infrastructure.</p>
I have worked in Keauhou Bay and swam in the waters for 16 years, it is a relatively pristine bay, compared to areas on	Heather Laursen	The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>the island where heavy development has affected the area. I recall at Keauhou swimming with my daughter after an occasion of heavy precipitation causing runoff from the golf courses, we were concerned with the degree of foaming, the algae blooms in the waters. My daughter and I were concerned and confused at the time, but then as we've become more educated we understand that it was because of the golf course polluting, with the trees removed in the furthering of development we will expect these waters to be blooming with algae, forming of the waters, and the marine life increasingly suffering.</p>		<p>quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Kamehameha Schools acknowledges the potential for runoff from the golf course (not owned by Kamehameha Schools) located mauka of the Project Area during heavy rain events. Fertilizers and other nutrient pollutants can be harmful to coastal marine environments by promoting algae growth, which can disrupt marine ecosystems. Currently, the portion of the Project Area between 'Ahu'ula cliff and the golf course is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or erosion control benefits. The Project does not propose the removal of native forests. With the implementation of the Project, native landscape plantings and active land management will help stabilize soils at the Project Area.</p>
<p>As a member of the Keauhou Canoe Club for decades, I have personally enjoyed all the beauty and culture that Keauhou Bay, as it exists today, has provided for the community and visitors alike. The natural landscape and koa haole tree canopy that lies just mauka of the bay acts like a filter before any runoff from housing and golf course above it reaches the ocean--THIS is the reason that Keauhou Bay is still beautiful, STILL provides habitat for fish, sea turtles, mantas that draw locals and visitors to enjoy the natural beauty that exists ONLY HERE and the very reason why HAR 13-57 was enacted to protect this sensitive habitat.</p>	Robert Vatter	<p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Kamehameha Schools acknowledges the potential for runoff from the golf course (not owned by Kamehameha Schools) located mauka of the Project Area during heavy rain events. Fertilizers and other nutrient pollutants can be harmful to coastal marine environments by promoting algae growth, which can disrupt marine ecosystems. Currently, the portion of the Project Area between 'Ahu'ula cliff and the golf course is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		erosion control benefits. The Project does not propose the removal of native forests. With the implementation of the Project, native landscape plantings and active land management will help stabilize soils at the Project Area.
Keauhou Bay is in fact a clean environment where swimmers exercise, tourists and local residents view manta rays and enjoy the bay by kayak, boat and canoe for snorkeling, diving and fishing. The bay waters are circulated hourly with fresh ocean waters and this keeps the bay environment clean and healthy for all things biological. If what the detractors say of this new resort development was true, then we would currently see very sick dolphins, ailing manta rays, polluted monk seals, tumor infested green sea turtles and reduced plankton populations and serious coral issues. But we are not experiencing a decline in species or their health.	G Hand	<p>The EIS notes that the 2020 State of Hawai'i Water Quality Monitoring and Assessment Report, known as the Integrated Report (IR), identifies Keauhou Bay as an impaired water body. Turbidity was the leading cause of impairment. Nonpoint sources of pollution in the State primarily consist of cesspools, agricultural land use, urban land use, and feral ungulate destruction and soil erosion in conservation lands.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
Traditionally, the Ahupua'a runs from the mountain and continues from the shoreline to the outer edges of our coral reefs. This organized distribution of resources established sustainability of the population. This last century we have fallen short of any bond of developing our oceans with our lands. The responsibility to replant, renature, reseed and protect our forests {Kahu} needs to be diversified back to our oceans as our land is managed. I am asking for more, trial programs of increasing coral into the Keauhou Bay by 30% with replenishment, replanting and reseeding to reforest our coral reefs. Hawaii has 410,000 acres of coral, the majority of this states coral reefs have died including 25% of the fish and critters. High tech mapping (Refugia) using coral response to illumination has shown 50% loss of reef and fish due to beaching, pollution, development and	Jan Brinkman	<p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p> <p>Although Kamehameha Schools does not have jurisdiction to manage lands in ocean waters, there are opportunities for the Project to support marine conservation through place-based educational programming. Project facilities could host visiting researchers and support student engagement through hands-on learning experiences, cultural education, and direct involvement in conservation initiatives. Additionally Kamehameha Schools is open</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>fishing activities. NOAA estimates total economics value of Hawaiian coral reefs at 33.57 billion dollars. Our reef protect our shorelines and provide recreation and livelihood to the tourist industry. I am sadly humbled at the sight of tourists excitement to see nothing but empty skeletons of these coral animals. The Hawaiian Chants of Kumu Lipo clarifies that life began with the emergence of a coral polyp, it became more complex and developed into a community. Science also supports coral polyps were the first of life. Our coral reefs and reefs through out the world are threatened with extinction by 2050. Hawaii has 80% of the coral reefs in the USA. Causing further accelerated coral loss is elevated by carbon dioxide levels on this planet. Reef ecosystem destruction result with 25% of all marine species being at risk, while the assisted economic loss will expose people to decreased food resources and security of sustainability.</p> <p>Having a 100-ton Master Coast Guard Captain License for over 40 years I was blessed with over a dozen years Captaining out of Keauhou Bay. I also had the pleasure of logging over 10,000 scuba dives along the Kona Coast and also exploring Palau and New Zealand. In the 90's we had a Keauhou Bay clean-up, being active with this project I had my daughter and many other school students that were eagerly efficient. In the 70's our storms caused damage to our corals and we, the dive company would replace and replant coral of many species even if it was the gesture was turning them upright so the polyps could feed. January 80 storm was devastating and we took the 'build and they will come' hold true to marine life. Even though displacement occurred the fish would move to the coral heads, egg cases continued to be laid, protection was contained for molting crabs and lobsters, eels, shells and nudibranch could also take shelter. The most important was the coral polyp could survive and there circle of replenishment continued through displacement. We also placed fragile pieces of coral into lobe coral for support and actually they gave great support and seemed to fuse around the bases. Through hurricane</p>		<p>to exploring partnerships with other marine conservation organizations to steward coastal resources.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Iwa and Iniki our ecosystem was already stressed as we went through great development along the Kona coast with construction, pollution, population and more water activity stress. The ocean acidification with warmer waters have left us in dire need. It is my vision and dream to have Senator Dr. Tim Richards present a bill to the floor to aid and assist our oceans with any coastal development making replenishment and restoring critical habitat mandatory. We must ask more from all coastal resorts to be participators in ocean projects and reform including tourist attractions participation. I am here to ask everyone for 'more' in this critical time for our coral reefs and oceans. Our obligation to our future generation is that they are equally entitled to our natural resources. Keauhou Bay and the surrounding land could also be embraced for our future generations to decide what is best for their future generation.</p>		
<p>, I am concerned about the nēnē who hang out on the golf course, in an area adjacent to this proposed development (the first/ninth fairway and the far end of the driving range on Kona Country Club). I am attaching pictures, which I also sent to nēnē.org a while back. I and my neighbors first observed the nēnē there in fall 2023. They seem to hang out there every day, Fall through Spring. How will you ensure that the nēnē do not get disturbed during your years of construction activities? I don't know what to suggest to mitigate this. All I know is nēnē need all the help they can get to expand their range.</p>	<p>Marjorie Bryant</p>	<p>Section 4.6 of the EIS addresses Biological Resources. A <i>Natural Resource Assessment</i>, provides detailed information on the biological conditions of Project Area and is included as Appendix K of the EIS.</p> <p>Although the Nēnē (Hawaiian Goose) was reclassified from endangered to threatened status in 2019, there is still a need for continued protection. The Hawai'i Department of Land and Natural Resources (DLNR) recommends the installation of a construction barrier to prevent Nēnē from entering active construction zones. Key limiting factors affecting the recovery of the species include predation by introduced mammals, limited nutritional resources for breeding females and goslings, restricted availability of suitable habitat, and disturbance or mortality caused by human activity. The Project will implement BMPs to mitigate potential impacts during project construction activities. Additionally, habitat enhancement efforts, such as native plant restoration and invasive species control could provide further support for the nēnē in the area.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<b>Marine Life in Bay</b>		
<p>First, does this EIS have any kind of reports and studis on how the endangered species and marine life will handle the extra pollution due to development and golf course runoff because Keauhou Bay is their habitat and this development WILL be changing an entire ecosystem. In the Endangered Species Act of 1973 Under Section 2 (b), "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keauhou Bay. The Green Sea Turtle swims in Keauhou Bay weekly and the monk seal has also been seen swimming and resting in Keauhou Bay. Both of these marine animals are on the endangered species list. The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." "Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." ENDANGERED SPECIES CONSERVATION Endangered Species Act "Section 2. Findings, Purposes, and Policy (4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to— (b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section." Keauhou Bay IS the monk seals and the green sea turtle's habitat and to allow a bungalow resort to be developed in</p>	<p>Donald                      Robert Berger                      Stephen Goudreau                      Sara Irwin Goudreau                      Lucia Kaplan                      Rebecca Melendez                      Sherina Ong                      Roslyn Patrick-Sunnes                      Deborah Sevy                      Mayari Sherina Ong                      Lisa Thatcher                      Jeannette Gurung                      Laura Johnson                      Mayari Sherina Ong                      Riley Reynolds                      Sharron Rudolph                      Curt and Ellen Winningham</p>	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life, including the Hawaiian monk seal and green sea turtle. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term. EIS Section 4.5 discusses Project stormwater management and drainage improvements.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p> <p>The Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Keauhou Bay, that is these endangered species habitat, is to threaten these endangered species habit with golf course runoff pollution, as well as development pollution and hence, threaten their habitat, hence their lives, and goes completely against the Endangered Species Act of 1973. The words in the Endangered Species Act states, "to conserve" and conserving the endangered species that enter into Keauhou Bay would be to NOT DEVELOP A BUNGALOW RESORT because this would cause serious pollution runoff that would pollute the bay and endanger these already endanagared species, the green sea turtle and the monk seal. Does this EIS have any reports on the endangered species that frequent Keauhou Bay because this is their habitat. Under the Conservation Program there should be research done on endangered species and their associated ecosystems, which is Keauhou Bay. Because this bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM. "§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems. Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species."</p> <p>If you allow this development it WILL POLLUTE Keauhou Bay as the above article (that was written in 2014 because runoff water from developments were polluting the ocean even then) states, and this bay holds many sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals that have rested on the dock before and...that will ALL be harmed by the more sever pollution runoff that WILL happen</p>		<p>drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>The existing Project Area lacks active management and does not contain infrastructure to capture or treat stormwater, resulting in untreated runoff that may flow toward the ocean. With implementation of the Project, drainage improvements and best management practices will be introduced to capture and treat runoff on site. These measures will reduce the potential for stormwater-related impacts, improving current conditions.</p> <p>The Project will be constructed entirely on land and does not include any direct discharges to coastal waters. As a result, water quality conditions in Keauhou Bay are not expected to worsen and may improve through reduced sediment and pollutant loading.</p> <p>The KBMP is intended to enhance shoreline access to Keauhou Bay, providing users with improved entry to public recreational areas and the ocean. While Kamehameha Schools does not have jurisdiction over the enforcement of marine wildlife interaction regulation, it may contribute to ocean conservation through educational initiatives and strategically placed signage.</p> <p>Although Kamehameha Schools does not have jurisdiction to manage lands in ocean waters owned by the State, there are opportunities for the Project to support marine conservation through place-based educational programming. Project facilities could host visiting researchers and support student engagement through hands-on learning experiences, cultural education, and direct involvement in conservation initiatives. Additionally,</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>because developments can't help but pollute the water nearby. Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL, and if a resort is allowed to be built, that will bring a lot more people down to Keauhou Bay and if a monk seal is resting they most likely will disturb the monk seal with their selfies because it is fully known this is now a SELFIE CULTURE. Federally Protected Green Sea Turtle Swim in Keauhou Bay Often The green sea turtle that is federally protected and can be seen in Keuhou Bay weekly. Has the EIS done any research on what a high population would do in such a small area, and what will happen to the endangered species that live there because it's their habitat and a high population will change this bay forever? Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development? Because the studies below show developments kill coral, marine life and zooplankton are kill and negatively affected as well, and zooplankton is the manta ray food. Manta rays are in this bay every night to eat zooplankton and sometimes they are in this bay during the day time too. If you allow this bay to be development you will be allowing all types of marine life to die and there is NO WAY to stop this from happening because polluted runoff rain water from developments can't be fully stopped. It is what has happened in ALL coastal develoments. The coral all over Hawai'i has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all Aquatic Life there, and even the Manta Rays that go there to eat zooplankton from the Manta Ray tours at night, and they eat it during the day in that area as well because they need to eat 5 times their body weight in zooplankton daily. It's Been Proven Resort Developments KILL Marine Life The manta rays go to Keauhou Bay every night to eat zooplankton and if you allow this development that WILL have runoff water, you WILL be causing zooplankton to be seriously affected.</p>		<p>Kamehameha Schools is open to exploring partnerships with other marine conservation organizations to steward coastal resources.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the EIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Development of Keauhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this could cause the manta ray food source to disappear and that will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on the manta ray tour for their income. Where are the EIS reports on human density because this resort will increase this area in population by hundreds. Below are reports that human population destroy coral reefs. If you allow this resort to be developed, you will be destroying the coral reefs in the bay because this bay is extremely small and used by a lot of locals already for fishing, canoing, swimming, snorkeling, paddle boarding, surfing, boating...it can't afford more use by many thousands more people yearly. If you allow Keauhou Bay to be development there will be a higher population in the bay and that will hurt the coral in the bay as well. There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles. If you allow this resort the amount of people in this bay will fully increase. It's Been Proven an Increase in Human Population Destroys Coral Reefs If a Bungalow Resort is allowed to be built in Keauhou Bay, it will forsure bring a serious increase in human traffic.</p>		
<p>The Green Sea Turtle swims in Keauhou Bay weekly and the monk seal has also been seen swimming and resting in Keauhou Bay. Both of these marine animals are on the endangered species list. Endangered Species Act "Section 2. Findings, Purposes, and Policy (4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various</p>	<p>David Hill                      Kaleihua Kamaka                      Kellie Kilcua                      William Lim</p>	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life, including the Hawaiian monk seal and green sea turtle. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>species of fish or wildlife and plants facing extinction, pursuant to— (b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section." <b>FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED</b> The green sea turtle is federally protected and can be seen in Keauhou Bay weekly. Allowing this development <b>WILL POLLUTE</b> Keauhou Bay. Keauhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will <b>ALL</b> be harmed by the severe pollution runoff that <b>WILL</b> happen because developments have been shown to <b>ALWAYS</b> pollute the water is that is nearby. Keauhou Bay is known as a <b>RESTING AREA</b> for the <b>ENDANGERED MONK SEAL</b>. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keauhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keauhou Bay will likely be changed forever. <b>gered species</b>. Keauhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973. The verbiage in the Endangered Species Act states, "to conserve". In this case,</p>	<p>Jenni Lund                      Rebecca Melendez                      Alicia Morrier                      Belinda Pate                      Jo Quinn                      Jason Rigmaiden                      Bryn Stites                      Wim Verkaok                      Jyn Watson                      Celia Murry                      Tom Carey                      Tyson Bourassa                      Keana Dawson                      Debra Javar</p>	<p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term. EIS Section 4.5 discusses Project stormwater management and drainage improvements.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p> <p>The Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards,</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>"to conserve" would be to protect the land around Keauhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff. Does this EIS have any reports on the endangered species that frequent Keauhou Bay? This is their habitat and it needs to be "conserved". Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development? Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well. Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments. It's Been Proven an Increase in Human Population Destroys Coral Reefs If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. The area simply cannot afford or support this development. The coral all over Hawai'i has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected</p>		<p>which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>The existing Project Area lacks active management and does not contain infrastructure to capture or treat stormwater, resulting in untreated runoff that may flow toward the ocean. With implementation of the Project, drainage improvements and best management practices will be introduced to capture and treat runoff on site. These measures will reduce the potential for stormwater-related impacts, improving current conditions.</p> <p>The Project will be constructed entirely on land and does not include any direct discharges to coastal waters. As a result, water quality conditions in Keauhou Bay are not expected to worsen and may improve through reduced sediment and pollutant loading.</p> <p>The KBMP is intended to enhance shoreline access to Keauhou Bay, providing users with improved entry to public recreational areas and the ocean. While Kamehameha Schools does not have jurisdiction over the enforcement of marine wildlife interaction regulation, it may contribute to ocean conservation through educational initiatives and strategically placed signage.</p> <p>Although Kamehameha Schools does not have jurisdiction to manage lands in ocean waters owned by the State, there are opportunities for the Project to support marine conservation through place-based educational programming. Project facilities could host visiting researchers and support student engagement through hands-on learning experiences, cultural education, and direct involvement in conservation initiatives. Additionally, Kamehameha Schools is open to exploring partnerships with other marine conservation organizations to steward coastal resources.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the EIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>should the plankton die. Development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.</p>		
<p>Keauhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endangered these species. This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.</p>	<p>Danica Ann Barretto                      Susie Jenkins                      Nawahine Kahoopii                      Veronique Leferink                      Ellen Manko                      Heather Masunaga                      Jasmin McCracken                      Michelle Melendez                      Koohan Paik-Mander                      Alexis Russel                      Umberto Taormina                      Lisa Thatcher                      Sandra Vacchio</p>	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life, including the Hawaiian monk seal and green sea turtle. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>The KBMP is intended to enhance shoreline access to Keauhou Bay, providing users with improved entry to public recreational areas and the ocean. While Kamehameha Schools does not have jurisdiction over the enforcement of marine wildlife interaction regulation, it may contribute to ocean conservation through educational initiatives and strategically placed signage.</p> <p>The Project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
	Riley Reynolds Sharron Rudolph Curt and Ellen Wingham	
This and increasing human and vehicle traffic above the bay will further damage the marine life in and near the bay.	Joyce Barbarich	<p>The KBMP is intended to enhance shoreline access to Keauhou Bay, providing users with improved entry to public recreational areas and the ocean. While Kamehameha Schools does not have jurisdiction over the enforcement of marine wildlife interaction regulation, it may contribute to ocean conservation through educational initiatives and strategically placed signage.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area.</p>
The risks of polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project are demonstrated in research you should be aware of: • National Oceanic and Atmospheric Administration (NOAA), showing that such developments in coastal areas pollute the water and endanger marine life and the delicate ecosystem. The green sea turtle and monk seal are endangered species that depend on Keauhou Bay for habitat.	Heather Laursen	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life, including the Hawaiian monk seal and green sea turtle. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term. EIS Section 4.5 discusses Project stormwater management and drainage improvements.</p> <p>All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>sediment and pollutants from reaching nearby water bodies during construction.</p> <p>The Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>The existing Project Area lacks active management and does not contain infrastructure to capture or treat stormwater, resulting in untreated runoff that may flow toward the ocean. With implementation of the Project, drainage improvements and best management practices will be introduced to capture and treat runoff on site. These measures will reduce the potential for stormwater-related impacts, improving current conditions.</p> <p>The Project will be constructed entirely on land and does not include any direct discharges to coastal waters. As a result, water</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>quality conditions in Keauhou Bay are not expected to worsen and may improve through reduced sediment and pollutant loading.</p> <p>The KBMP is intended to enhance shoreline access to Keauhou Bay, providing users with improved entry to public recreational areas and the ocean. While Kamehameha Schools does not have jurisdiction over the enforcement of marine wildlife interaction regulation, it may contribute to ocean conservation through educational initiatives and strategically placed signage.</p> <p>Although Kamehameha Schools does not have jurisdiction to manage lands in ocean waters owned by the State, there are opportunities for the Project to support marine conservation through place-based educational programming. Project facilities could host visiting researchers and support student engagement through hands-on learning experiences, cultural education, and direct involvement in conservation initiatives. Additionally, Kamehameha Schools is open to exploring partnerships with other marine conservation organizations to steward coastal resources.</p>
<p>The DEIS adversely and significantly impacts marine life and other wildlife. 8 Keauhou Bay is home to certain species of sea turtles, dolphins, whales, manta rays, sharks, monk seals, corals, and seaweed which are all threatened or endangered. The DEIS states: “Both endangered Hawaiian monk seals (<i>Monarchus schauinslandi</i>) and the threatened Pacific green sea turtle (<i>Chelonia mydas</i>) are regularly reported from Kona waters (David, 2022). Although unlikely, either species could haul out along the shoreline close to the dock or by the beach landing. If either species is detected within 300 ft of ongoing construction, operations must cease and not continue until the animal has departed the area on its own accord.” (DEIS 4.6) Such mitigation measures address only part of the problem, namely what happens during the construction phase of the project. The DEIS states: “The Project involves the establishment of a recreation corridor, expansion of open space, and improved access to the shoreline.” (DEIS at 4.10) After the construction of the 150-unit resort, what impact will the</p>	Tamyra Rice	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices.</p> <p>The KBMP is intended to enhance shoreline access to Keauhou Bay, providing users with improved entry to public recreational areas and the ocean. While Kamehameha Schools does not have jurisdiction over the enforcement of marine wildlife interaction regulation, it may contribute to ocean conservation through educational initiatives and strategically placed signage.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>additional tourist population (approximately 300 persons at any given time), who have improved access to the shoreline, have on these species when they are on the beach? Case in point: in a 2019 study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals and they discovered that human disturbance is more common than they thought. Additionally, the DEIS misconstrues the legal standard regarding threatened species. The legal standard is not whether there is “any existing habitat...[that] is essential for the continued survival of listed species” but whether there is a “taking” (a threat to endangered species). 9 If there is a “taking” then a federal permit and a Habitat Conservation Plan is required. The DEIS does not mention this requirement. The DEIS states: “Nēnē (<i>Branta sandvicensis</i>) is present in North Kona, but so far not seen in the Keauhou area (David, 2022).” (DEIS at 4.6) Nēnē has recently been sighted and photographed at the project area. Nēnē is listed as endangered by the State of Hawaii and federally listed as threatened. They are protected under the federal Migratory Bird Treaty Act. The DEIS does not contemplate this finding. The DEIS substantially affects these threatened and endangered species, and their habitat in the ways enumerated above, namely by increasing the number of tourists interfacing with these species and by worsening climate change effects and the Bay’s water quality.</p>		<p>Kamehameha Schools is also committed to continued collaboration with the Department of Land and Natural Resources to explore future marine stewardship strategies.</p> <p>An analysis of the proposed Project’s potential population impact suggests that it would not significantly impact coastal ecosystems. The proposed low-impact lodging with an estimated population of 250 guests at any given time (based on 150 rooms with an average occupancy of 2.25 people per room at a 74% occupancy rate), represents a relatively small increase. This limited scale of visitor accommodation is not expected to significantly affect marine life, as not all guests will use the bay simultaneously.</p> <p>Although Kamehameha Schools does not have jurisdiction to manage lands in ocean waters owned by the State, there are opportunities for the Project to support marine conservation through place-based educational programming. Project facilities could host visiting researchers and support student engagement through hands-on learning experiences, cultural education, and direct involvement in conservation initiatives. Additionally, Kamehameha Schools is open to exploring partnerships with other marine conservation organizations to steward coastal resources.</p> <p>Section 4.6 of the EIS addresses Biological Resources. A <i>Natural Resource Assessment</i>, provides detailed information on the biological conditions of Project Area and is included as Appendix K of the EIS.</p> <p>Although the Nēnē (Hawaiian Goose) was reclassified from endangered to threatened status in 2019, there is still a need for continued protection. The Hawai’i Department of Land and Natural Resources (DLNR) recommends the installation of a construction barrier to prevent Nēnē from entering active construction zones. Key limiting factors affecting the recovery of the species include predation by introduced mammals, limited nutritional resources for breeding females and goslings, restricted availability of suitable habitat, and disturbance or mortality caused by human activity. The Project will implement BMPs to mitigate potential impacts during project construction activities. Additionally, habitat enhancement</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		efforts, such as native plant restoration and invasive species control could provide further support for the nēnē in the area.
<p>The endangered Monk Seal has been known to rest in Keauhou Bay and if a resort is allowed to be built, that will bring a lot more people down to Keauhou Bay and if a monk seal is resting they most likely will disturb the monk seal with their selfies because it is fully known this is now a SELFIE CULTURE. This information is by NOAA Scientist, "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'sealfie!'"</p> <p>That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals.</p> <p>They discovered that human disturbance is more common than they thought</p> <p>There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.</p>	Rebecca Melendez	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>The KBMP is intended to enhance shoreline access to Keauhou Bay, providing users with improved entry to public recreational areas and the ocean. While Kamehameha Schools does not have jurisdiction over the enforcement of marine wildlife interaction regulation, it may contribute to ocean conservation through educational initiatives and strategically placed signage.</p> <p>Although Kamehameha Schools does not have jurisdiction to manage lands in ocean waters owned by the State, there are opportunities for the Project to support marine conservation through place-based educational programming. Project facilities could host visiting researchers and support student engagement through hands-on learning experiences, cultural education, and direct involvement in conservation initiatives. Additionally, Kamehameha Schools is open to exploring partnerships with other marine conservation organizations to steward coastal resources.</p>
<p>The plan calls for the development of a new hotel adjacent to the bay. Such construction will certainly come with increased run-off into the bay, damaging corals, fish and other marine life, especially the well-known local manta population.</p>	Jeffrey Malison	<p>Although Kamehameha Schools does not have jurisdiction to manage lands in ocean waters owned by the State, there are opportunities for the Project to support marine conservation through place-based educational programming. Project facilities could host visiting researchers and support student engagement through hands-on learning experiences, cultural education, and direct involvement in conservation initiatives. Additionally, Kamehameha Schools is open to exploring partnerships with DLNR</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>and other marine conservation organizations to steward coastal resources.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area. These actions are anticipated to result in long-term beneficial impacts to the anchialine pond habitat.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
<p>To Whom It May Concern, The endangered Monk Seal has been known to rest in Keauhou Bay and if a resort is allowed to be built, that will bring a lot more people down to Keauhou Bay and if a monk seal is resting they most likely will disturb the monk seal with their selfies because it is fully known this is now a SELFIE CULTURE. This information is by NOAA Scientist, "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'sealfie!'" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought."</p>	<p>Rebecca Melendez</p>	<p>The KBMP is intended to enhance shoreline access to Keauhou Bay, providing users with improved entry to public recreational areas and the ocean. While Kamehameha Schools does not have jurisdiction over the enforcement of marine wildlife interaction regulation, it may contribute to ocean conservation through educational initiatives and strategically placed signage. Kamehameha Schools is also committed to continued collaboration with the Department of Land and Natural Resources to explore future marine stewardship strategies.</p> <p>The Project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>"Hawai'i's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources</p>	<p>Rebekah Macquarrie</p>	<p>The KBMP is intended to enhance shoreline access to Keauhou Bay, providing users with improved entry to public recreational areas and the ocean. While Kamehameha Schools does not have jurisdiction over the enforcement of marine wildlife interaction regulation, it may contribute to ocean conservation through educational initiatives and strategically placed signage. Kamehameha Schools is also committed to continued collaboration with the Department of Land and Natural Resources to explore future marine stewardship strategies.</p> <p>The Project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area. These actions are anticipated to result in long-term beneficial impacts to the anchialine pond habitat.</p>
<p>The Endangered Species Act states, "The Endangered Species Act of 1973 provides a framework to conserve and protect endangered and threatened species and their habitats both domestically and abroad."</p> <p>The endangered Monk Seal and the endangered Green Sea Turtle both swim and live in Keauhou Bay, and the Endangered Species Act states, "provides a framework to conserve and protect endangered and threatened species and their habitats..."</p> <p>Keauhou Bay IS the monk seals and the green sea turtle's habitat and to allow a bungalow resort to be developed in Keauhou Bay, that is these endangered species habitat, is to threaten these endangered species habit with development</p>	<p>Rebecca Melendez</p>	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life, including the Hawaiian monk seal and green sea turtle. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area. These actions are anticipated to result in long-term beneficial impacts to the anchialine pond habitat.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>pollution and hence, threaten their lives, and go completely against the Endangered Species Act of 1973.</p> <p>"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.</p> <p>Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.</p> <p>Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."</p> <p>If this development is allowed it will have to clear land and, "For instance, a huge land-clearing effort is required... often leading to the destruction of entire ecosystems. To clear all this land, heavy machinery is used, which contributes large amounts of carbon emissions and affects nearby waterways."</p> <p>Which leads to the golf course runoff that WILL happen because of the cleared land and installed pavement that will allow golf course runoff to be severe.</p> <p>Is there an in depth report on how much it rains in Keauhou because it rains mostly at night throughout the entire year.</p> <p>Now, "The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low</p>		<p>Section 4.2.1 of the EIS discusses Climate and Rainfall. The annual rainfall at the Project Area is 35 inches. The University of Hawai'i Geography Department Rainfall Atlas of Hawai'i reports February being the driest month with 1.9 in. and July the wettest with 4.4 in. of rainfall.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Kamehameha Schools acknowledges the potential for runoff from the golf course (not owned by Kamehameha Schools) located mauka of the Project Area during heavy rain events. Fertilizers and other nutrient pollutants can be harmful to coastal marine environments by promoting algae growth, which can disrupt marine ecosystems. Currently, the portion of the Project Area between 'Ahu'ula cliff and the golf course is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or erosion control benefits. The Project does not propose the removal of native forests. With the implementation of the Project, native landscape plantings and active land management will help stabilize soils at the Project Area. Additionally, the Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Although Kamehameha Schools does not have jurisdiction to manage lands in ocean waters owned by the State, there are opportunities for the Project to support marine conservation through place-based educational programming. Project facilities could host visiting researchers and support student engagement through hands-on learning experiences, cultural education, and</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>heights also makes it even more vulnerable to pests, which leads to more pesticide use."</p> <p>These pesticides will be in the runoff that will enter Keauhou Bay more severely because of the development's pavement. As of right now the trees and land that they want to clear and develop their bungalow resort in, is a natural pollution filter, the land soaks in these pesticides and is the BEST Protection Filter Keauhou Bay has from golf course pollution. The trees and the land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay, hence for these endangered species habitat.</p> <p>Please reject Kamehameha Schools EIS because it will have a NEGATIVE impact in Keauhou Bay and fully threaten the lives of these endangered species, as well as completely go against the Endangered Species Act of 1973 under Section 2. Findings, Purposes, and Policy</p> <p>Keauhou Bay MUST BECOME a conservation area for these endangered species because it is their habitat as of today and to allow a resort development to be built above this bay would threaten the very lives of these endangered species because it will allow golf pollution and development pollution to run into the species natural habitat, which is Keauhou Bay.</p>		<p>direct involvement in conservation initiatives. Additionally, Kamehameha Schools is open to exploring partnerships with other marine conservation organizations to steward coastal resources.</p>
<p>The plan calls for the development of a new hotel adjacent to the bay. Such construction will certainly come with increased run-off into the bay, damaging corals, fish and other marine life, especially the well-known local manta population. The small bay already has a very high level of human use. Adding another hotel to the bay area will greatly increase the level of human use to a point that further damage to the corals and other marine life will be inevitable.</p>	<p>Jeffrey and Leann Malison</p>	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>The existing Project Area lacks active management and does not contain infrastructure to capture or treat stormwater, resulting in untreated runoff that may flow toward the ocean. With implementation of the Project, drainage improvements and best management practices will be introduced to capture and treat runoff on site. These measures will reduce the potential for stormwater-related impacts, improving current conditions.</p> <p>The Project will be constructed entirely on land and does not include any direct discharges to coastal waters. As a result, water quality conditions in Keauhou Bay are not expected to worsen and may improve through reduced sediment and pollutant loading.</p> <p>Although Kamehameha Schools does not have jurisdiction to manage lands in ocean waters owned by the State, there are opportunities for the Project to support marine conservation through place-based educational programming. Project facilities could host visiting researchers and support student engagement through hands-on learning experiences, cultural education, and direct involvement in conservation initiatives. Additionally, Kamehameha Schools is open to exploring partnerships with other marine conservation organizations to steward coastal resources.</p>
<p>Please, read the scientific proof below and state in your report that this Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT in Keauhou Bay as stated in all the different reported articles below. Keauhou Bay is a DOCUMENTED RESTING AREA for the ENDANGERED MONK SEAL, and if a resort is allowed to be built, that will bring a lot more people down to Keauhou Bay and if a monk seal is resting they most likely will disturb the monk seal with their selfies because it is fully known this is now a SELFIE</p>	<p>Donna Cherrier</p>	<p>The KBMP is intended to enhance shoreline access to Keauhou Bay, providing users with improved entry to public recreational areas and the ocean. While Kamehameha Schools does not have jurisdiction over the enforcement of marine wildlife interaction regulation, it may contribute to ocean conservation through educational initiatives and strategically placed signage. Kamehameha Schools is also committed to continued collaboration with the Department of Land and Natural Resources to explore future marine stewardship strategies.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>CULTURE. This information is by NOAA Scientist, "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'sealfie'!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought."  <a href="https://www.fisheries.noaa.gov/feature-story/endangered-hawaiianmonk-seals-cry-foul-over-selfies">https://www.fisheries.noaa.gov/feature-story/endangered-hawaiianmonk-seals-cry-foul-over-selfies</a></p>		<p>The Project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p>
<p><b>GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS</b></p> <p>"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use."</p> <p>These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable! Please read from Wikipedia, " Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system. The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references. the Hawai'i government states that Natural</p>	<p>Ambika Rose Ivy Jenna Hancock</p>	<p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. An analysis of existing drainage conditions, proposed infrastructure improvements, and mitigation measures are evaluated. Estimates of existing and projected stormwater runoff peak flows are also provided.</p> <p>To mitigate stormwater runoff, the Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p> <p>Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project Area, surface runoff generally does not occur in the typical rainfall occurrence. As a result, the Project Area does not contain any visible natural gulches or waterways. Runoff typically either percolates into the underlying groundwater or evaporates into the atmosphere.</p> <p>Kamehameha Schools acknowledges the potential for runoff from the golf course (not owned by Kamehameha Schools) located</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Ground Cover has 10% runoff, where has development has 55% runoff. These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat. The cost of what stands to be lost is far too high to allow this deveopment to happen. Please save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.</p>		<p>mauka of the Project Area during heavy rain events. Fertilizers and other nutrient pollutants can be harmful to coastal marine environments by promoting algae growth, which can disrupt marine ecosystems.</p> <p>Currently, the portion of the Project Area between 'Ahu'ula cliff and the golf course is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or erosion control benefits. The Project does not propose the removal of native forests. With the implementation of the Project, native landscape plantings and active land management will help stabilize soils at the Project Area.</p> <p>Additionally, the project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
Most disturbed would be the water quality and negative environmental impact to the wildlife in the bay from runoff.	Myland Hui	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area. These actions are anticipated to result in long-term beneficial impacts to the anchialine pond habitat.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
There's always talk about building and little talk about the impact and infrastructure. Water pollution, traffic, wild life and the desecration of sacred land are just a few of the things I'm concerned about. Please don't allow this development. It's a heartbreaking thought. Keauhou Bay is a very special place and should remain as is with its natural beauty and mana.	Ann Eshabarr	<p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p>
Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endangered these species. This Bay is one of the	Diane Mistler	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life, including the Hawaiian monk seal and green sea turtle. The project will follow all federal and state guidelines regarding the protection of endangered</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
treasures we still have and worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is. Once it is gone it is impossible to get it back!!!		<p>species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area. These actions are anticipated to result in long-term beneficial impacts to the anchialine pond habitat.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
All I can see is dollar signs and the destruction of critical habitat for protected Monk Seals and Honu, as well as the Manta Rays that live right at the edge of the bay.	Pamela Wang	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area. These actions are anticipated to result in long-term beneficial impacts to the anchialine pond habitat.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.
The manta ray population in this area is rare and an experience sought after by wonderful people all over the world. Don't fuck it up! Fyi Watch the movie MILKED by James Cameron to further understand how easily the quality of drinking water can be affected on islands	Michele Makai	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life, including the manta ray population. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
A Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keauhou Bay as stated in the researched articles below. Please, DO NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development. Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area. Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the	Rosanne Shank Jennifer Ball Ivy Jenna Hancock Trinidad Hunt Patricia Knezek	<p>It is not always the case that development inevitably leads to pollution of nearby ocean waters. The impact of development on water quality largely depends on the type of development, quality of infrastructure, and the effectiveness of long-term management practices, as well as responsible construction methods in the short term.</p> <p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life, including the Hawaiian monk seal and green sea turtle. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>extra pollution due to development, and the golf course runoff? Keauhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem. ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keauhou Bay. The Green Sea Turtle swims in Keauhou Bay weekly and the monk seal has also been seen swimming and resting in Keauhou Bay. Both of these marine animals are on the endangered species list. Endangered Species Act "Section 2. Findings, Purposes, and Policy 2 (4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to— (b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section." This was taken from <a href="https://www.fisheries.noaa.gov/national/endangered-speciesconservation/endangered-species-ac">https://www.fisheries.noaa.gov/national/endangered-speciesconservation/endangered-species-ac</a> FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED The green sea turtle is federally protected and can be seen in Keauhou Bay weekly. The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES" Why does Hawaii have a runoff problem? Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components.</p>		<p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area. These actions are anticipated to result in long-term beneficial impacts to the anchialine pond habitat.</p> <p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. All construction activities will be confined to land, with no work planned in ocean waters, thereby limiting potential direct impacts on the bay's water quality. The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p> <p>Kamehameha Schools acknowledges the potential for runoff from the golf course (not owned by Kamehameha Schools) located mauka of the Project Area during heavy rain events. Fertilizers and other nutrient pollutants can be harmful to coastal marine environments by promoting algae growth, which can disrupt marine ecosystems. Currently, the portion of the Project Area between 'Ahu'ula cliff and the golf course is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or erosion control benefits. The Project does not propose the removal of native forests.</p> <p>The Project proposes stormwater and drainage improvements designed to minimize runoff entering Keauhou Bay. These improvements include the introduction of permanent Best Management Practices (BMPs), such as sediment control mechanisms and effective stormwater management systems. In the long term, the proposed drainage system, permanent BMPs, and new native landscaping will help capture and treat runoff from the Project Area and upslope areas, decreasing sediment, nutrient, and pollutant levels that might otherwise flow toward Keauhou Bay.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste... If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <a href="https://www.chemservice.com/news/pollutedrunoff-in-hawaii-endangers-green-sea-turtles/">https://www.chemservice.com/news/pollutedrunoff-in-hawaii-endangers-green-sea-turtles/</a> Allowing this development WILL POLLUTE Keauhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keauhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby. The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i 3 Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <a href="https://dlnr.hawaii.gov/dar/species/sea-turtles/">https://dlnr.hawaii.gov/dar/species/sea-turtles/</a> THE ENDANGERED MONK SEAL WILL BE AFFECTED Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keauhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below. Has the EIS done any research on what an increased population would do in such a small area, and</p>		<p>Additionally, the Project is adopting Low-Impact Development (LID) practices, which emphasize conserving natural features and employing localized, small-scale stormwater systems that mimic natural hydrologic processes. Prior to construction, a detailed drainage masterplan will be developed to integrate these strategies, including criteria for infiltration systems, stormwater detention and retention, flood analysis, and drainage system schematics.</p> <p>The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>The KBMP is intended to enhance shoreline access to Keauhou Bay, providing users with improved entry to public recreational areas and the ocean. While Kamehameha Schools does not have jurisdiction over the enforcement of marine wildlife interaction regulation, it may contribute to ocean conservation through educational initiatives and strategically placed signage. Kamehameha Schools is also committed to continued collaboration with the Department of Land and Natural Resources to explore future marine stewardship strategies.</p> <p>An analysis of the proposed Project's potential population impact suggests that it would not significantly impact coastal ecosystems. The proposed low-impact lodging with an estimated population of 250 guests at any given time (based on 150 rooms with an average occupancy of 2.25 people per room at a 74% occupancy rate), represents a relatively small increase. This limited scale of visitor accommodation is not expected to significantly affect marine life, as not all guests will use the bay simultaneously.</p> <p>The Project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>what will happen to the endangered species that live there? With a significantly increased population their habitat of Keauhou Bay will likely be changed forever. This information is from a NOAA Scientist; "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species. "Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from Keauhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973. The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keauhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff. 4 Does this EIS have any reports on the endangered species that frequent Keauhou Bay? This is their habitat and it needs to be "conserved". Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM. "§195D-5 Conservation programs. (a) The department shall</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project.</p>		
<p>This development will negatively impact a sacred place, residents, current business owners, and the magnificent marine life in the area.</p>	<p>M. Kekoa Aukai-Richardson</p>	<p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p>
<p>If you were to snorkel there you will see dead coral and very few fish or na honu. During COVID restrictions, when Hanauma Bay was closed, the marine life there started to bounce back. The evidence is clear: the more people in an area, the worse the environment will be. This is especially true in Hawaii because, unlike in some other places, the state and counties do very little to enforce laws on the books regarding marine life, and are not acting fast enough to</p>	<p>M. Kekoa Aukai-Richardson</p>	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
create more laws and regulations to protect vulnerable places.		<p>impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area. These actions are anticipated to result in long-term beneficial impacts to the anchialine pond habitat.</p> <p>Although Kamehameha Schools does not have jurisdiction to manage lands in ocean waters owned by the State, there are opportunities for the Project to support marine conservation through place-based educational programming. Project facilities could host visiting researchers and support student engagement through hands-on learning experiences, cultural education, and direct involvement in conservation initiatives. Additionally, Kamehameha Schools is open to exploring partnerships with other marine conservation organizations to steward coastal resources.</p>
<p>Anecdotally and as a long-time snorkeler, one of the things I've noticed over the years is how the color of some of the tropical fish has changed, as they and their food chain are forced to eat more algae and eat fewer varieties of coral. Another example - I used to call Kahalu'u turtle beach because of the number of turtles we would see there on every snorkel, including on the beach. That number is now severely reduced. I fear the same will happen at Keauhou Bay. The ocean and sea-life are already stressed – the management plan would certainly add to the stressors facing the Bay and the ocean.</p>	Laurel Terry	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area. These actions are anticipated to result in long-term beneficial impacts to the anchialine pond habitat.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Although Kamehameha Schools does not have jurisdiction to manage lands in ocean waters owned by the State, there are opportunities for the Project to support marine conservation through place-based educational programming. Project facilities could host visiting researchers and support student engagement through hands-on learning experiences, cultural education, and direct involvement in conservation initiatives. Additionally, Kamehameha Schools is open to exploring partnerships with other marine conservation organizations to steward coastal resources.</p>
<p>Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endangered these species.</p>	<p>Adele Henkel</p>	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life, including the Hawaiian monk seal and green sea turtle. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area. These actions are anticipated to result in long-term beneficial impacts to the anchialine pond habitat.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>Although Kamehameha Schools does not have jurisdiction to manage lands in ocean waters owned by the State, there are opportunities for the Project to support marine conservation through place-based educational programming. Project facilities could host visiting researchers and support student engagement through hands-on learning experiences, cultural education, and direct involvement in conservation initiatives. Additionally, Kamehameha Schools is open to exploring partnerships with other marine conservation organizations to steward coastal resources.</p>
<p>The fish and crustaceans have declined, the ocean mammals do not visit as often, and frequent human swimmers are blessed with staph and even more serious infections.</p>	<p>Bill and Cindy Armer</p>	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area. These actions are anticipated to result in long-term beneficial impacts to the anchialine pond habitat.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>The existing Project Area lacks active management and does not contain infrastructure to capture or treat stormwater, resulting in untreated runoff that may flow toward the ocean. With implementation of the Project, drainage improvements and best</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>management practices will be introduced to capture and treat runoff on site. These measures will reduce the potential for stormwater-related impacts, improving current conditions.</p> <p>The Project will be constructed entirely on land and does not include any direct discharges to coastal waters. As a result, water quality conditions in Keauhou Bay are not expected to worsen and may improve through reduced sediment and pollutant loading.</p> <p>Although Kamehameha Schools does not have jurisdiction to manage lands in ocean waters owned by the State, there are opportunities for the Project to support marine conservation through place-based educational programming. Project facilities could host visiting researchers and support student engagement through hands-on learning experiences, cultural education, and direct involvement in conservation initiatives. Additionally, Kamehameha Schools is open to exploring partnerships with other marine conservation organizations to steward coastal resources.</p>
<p>Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endangered these species.</p>	<p>Donna Dufault</p>	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life, including the Hawaiian monk seal and green sea turtle. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area. These actions are anticipated to result in long-term beneficial impacts to the anchialine pond habitat.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive</p>

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Comments	Commenter	Responses
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Let's not forget the marine life that would be threatened by excess pollution and traffic. Keauhou Bay is habitat for monk seals and green sea turtles. More pollution and people would endangered these loved animals. Keauhou Bay is worth protecting. People catch fish there. I love to swim there. The Canoe club puts in there. Please do not put a resort in such a small area. Future generations would be deprived. If destroyed, it would not be restorable.	Kano Leohano	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life, including the Hawaiian monk seal and green sea turtle. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area. These actions are anticipated to result in long-term beneficial impacts to the anchialine pond habitat.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
I am a snorkeler, and I have noticed the negative impact that development has had on coral, fish, and honu. The ocean is already stressed - this plan will add to it.	Laurel Terry	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific</p>

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Comments	Commenter	Responses
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<p>And most importantly, for me, is the marine life that will be threatened, not only by the excess pollution but by the sheer number of people- normally not there- that would be using the Bay. Keauhou Bay is a monk seal and green sea turtle habitat. More pollution and people will further endanger these (already endangered!) animals, not to mention the toxicity to the reef and fish. I'm not quite sure I understand how a resort here could be culturally helpful. The eco-system of the Bay would change forever (and not for the better). Seems to me to be nothing more than a way to make money. Can't they find a less intrusive place to develop?</p>	<p>Marie LeBoeuf</p>	<p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p> <p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area. These actions are anticipated to result in long-term beneficial impacts to the anchialine pond habitat.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>The KBMP is intended to enhance shoreline access to Keauhou Bay, providing users with improved entry to public recreational areas and the ocean. While Kamehameha Schools does not have jurisdiction over the enforcement of marine wildlife interaction regulation, it may contribute to ocean conservation through educational initiatives and strategically placed signage. Kamehameha Schools is also committed to continued collaboration with the Department of Land and Natural Resources to explore future marine stewardship strategies.</p> <p>Additionally, there are opportunities for the Project to support marine conservation through place-based educational programming. Project facilities could host visiting researchers and support student engagement through hands-on learning experiences, cultural education, and direct involvement in conservation initiatives. Kamehameha Schools is open to exploring partnerships with other marine conservation organizations to steward coastal resources.</p>
<p>THIS is the reason that Keauhou Bay is still beautiful, STILL provides habitat for fish, sea turtles, mantas that draw locals and visitors to enjoy the natural beauty that exists ONLY HERE and the very reason why HAR 13-57 was enacted to protect this sensitive habitat.</p>	<p>Yasmin Vatter</p>	<p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p> <p>Kamehameha Schools understands the significance of Keauhou Bay as a habitat for native marine life, including the Hawaiian monk seal and green sea turtle. The project will follow all federal and state guidelines regarding the protection of endangered species, and Kamehameha Schools will continue to work with conservation experts to monitor and mitigate potential impacts.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>While the Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts to marine life were identified in the EIS, Table 4-9 of the DEIS outlines potential actions that could be taken to improve conditions for marine life in Ho'okūkū Pond within the Project Area. These actions are anticipated to result in long-term beneficial impacts to the anchialine pond habitat.</p> <p>Although Kamehameha Schools does not have jurisdiction to manage lands in ocean waters owned by the State, there are opportunities for the Project to support marine conservation through place-based educational programming. Project facilities could host visiting researchers and support student engagement through hands-on learning experiences, cultural education, and direct involvement in conservation initiatives. Additionally, Kamehameha Schools is open to exploring partnerships with other marine conservation organizations to steward coastal resources.</p>
<p>Our letter has been prepared under the authority of and in accordance with provisions of the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.), as amended (ESA). We have reviewed the information you provided and pertinent information in our files, as it pertains to federally listed species in accordance with section 7 of the ESA. Our data indicate the following species may occur or transit through the vicinity of the proposed project area: • Ōpe'ape'a or Hawaiian hoary bat (<i>Lasiurus cinereus semotus</i>), • Nēnē or Hawaiian goose (<i>Branta sandvicensis</i>), • Hawaiian waterbirds, including ae'ō or Hawaiian stilt (<i>Himantopus mexicanus knudseni</i>), 'ālae ke'oke'ō or Hawaiian coot (<i>Fulica alai</i>), and koloa maoli or Hawaiian duck (<i>Anas wyvilliana</i>), • Hawaiian seabirds, including Hawai'i Distinct Population Segment of the 'akē'akē or band-rumped storm-petrel (<i>Hydrobates castro</i>), 'a'ō or Newell's shearwater (<i>Puffinus newelli</i>), and 'ua'u or Hawaiian petrel (<i>Pterodroma sandwichensis</i>), • Sea turtles, including the Honu or green sea turtle (<i>Chelonia mydas</i>) and the honu'ea or Hawksbill</p>	<p>Colleen Cole (US Fish and Wildlife Service, Pacific Islands Fish and Wildlife Office)</p>	<p>Mahalo for providing the recommended mitigation measures. Your comments have been administratively recorded and incorporated where appropriate in Section 4.6 of the Final EIS.</p> <p>The Project's lighting configuration and design will be designed in accordance with applicable State and County standards. Consultation and discussions with the County will occur during land use approvals and during design review and approval of construction plans.</p> <p>As the project is not anticipated to impact offshore or open ocean habitats additional consultation with NOAA Fisheries is not required.</p> <p>Kamehameha School's will conduct a pre-construction survey of the project site for the presence of non-native tree tobacco to assess whether the Blackburn's sphinx moth may be present within the project area. Kamehameha Schools will continue to survey for tree tobacco for the duration of the Project and to remove any tree tobacco less than 3 ft in size.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>sea turtle (<i>Eretmochelys imbricata</i>), and • Blackburn’s sphinx moth (<i>Manduca blackburni</i>).</p> <p>A biological survey conducted by AECOS in 2021 did not record any federally listed plants, birds, or mammals in the proposed project area, however; we recommend that the project implement the U.S. Fish and Wildlife Service (Service) Avoidance and Minimization Measures provided below to avoid impacts to federally listed species. We have attached additional recommendations for Invasive Species Biosecurity Protocols (Attachment A) and Best Management Practices For Work In or Around Aquatic Environments (Attachment B). ‘Ōpe‘ape‘a The Hawaiian hoary bat roosts in woody vegetation across all islands and will leave their young unattended in trees and shrubs when they forage. If trees or shrubs 15 feet or taller are cleared during the pupping season, June 1 through September 15, there is a risk that young bats could inadvertently be harmed or killed, since they are too young to fly or move away from disturbance. Hawaiian hoary bats forage for insects from as low as 3 feet to higher than 500 feet above the ground and can become entangled in barbed wire used for fencing. In the DEIS, it stated that a qualified biologist would survey any trees taller than 15 ft during the bat breeding season prior to any disturbance to the tree. The Service does not recommend this method as roosting bats and pups are difficult to detect; therefore, woody plants should not be disturbed, removed, or trimmed during the bat birthing and pup rearing season. To avoid and minimize impacts to the endangered Hawaiian hoary bat we recommend you incorporate the following applicable measures into your project description: • Do not disturb, remove, or trim woody plants greater than 15 feet tall during the bat birthing and pup rearing season (June 1 through September 15). • Do not use barbed wire for fencing. Nēnē Nēnē are observed in a variety of habitats, but prefer open areas, such as pastures, golf courses, wetlands, natural grasslands and shrublands, and lava flows. Nēnē presence is unlikely at the</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>project site but nēnē may occasionally loaf or be attracted to areas during construction activities, especially if clearings are made or standing water is created. Nēnē are vulnerable to vehicular strikes, human presence, and construction activities because nēnē enter roadways, and foot traffic and equipment can crush nests hidden in vegetation. Human presence and disturbance can keep adults from protecting and provisioning vulnerable young in nests. To avoid and minimize potential project impacts to nēnē we recommend you incorporate the following measures into your project description:</p> <ul style="list-style-type: none"> <li>• Do not approach, feed, or disturb nēnē.</li> <li>• If nēnē are observed loafing or foraging within the project area during the breeding season (September through April), have a biologist familiar with nēnē nesting behavior survey for nests in and around the project area prior to the resumption of any work. Repeat surveys after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest).</li> <li>• Cease all work immediately and contact the Service for further guidance if a nest is discovered within a radius of 150 feet of proposed project, or a previously undiscovered nest is found within the 150-foot radius after work begins.</li> <li>• In areas where nēnē are known to be present, post and implement reduced speed limits, and inform project personnel and contractors about the presence of endangered species on-site.</li> </ul> <p>Hawaiian waterbirds are currently found in a variety of wetland habitats including freshwater marshes and ponds, coastal estuaries and ponds, artificial reservoirs, kalo or taro (<i>Colocasia esculenta</i>) lo'i or patches, irrigation ditches, sewage treatment ponds, and in the case of the Hawaiian duck, montane streams and marshlands. Hawaiian stilts may also be found wherever ephemeral or persistent standing water may occur. To avoid and minimize potential project impacts to Hawaiian waterbirds we recommend you incorporate the following measures into your project description:</p> <ul style="list-style-type: none"> <li>• In areas where waterbirds are known to be present, post and implement reduced speed limits, and</li> </ul>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>inform project personnel and contractors about the presence of endangered species on-site. • If water resources are located within or adjacent to the project site, incorporate applicable best management practices regarding work in aquatic environments into the project design (see enclosure). • Have a biological monitor that is familiar with the species' biology conduct Hawaiian waterbird nest surveys where appropriate habitat occurs within the vicinity of the proposed project site prior to project initiation. Repeat surveys again within 3 days of project initiation and after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest). If a nest or active brood is found: o Contact the Service within 48 hours for further guidance. o Establish and maintain a 100-foot buffer around all active nests and/or broods until the chicks/ducklings have fledged. Do not conduct potentially disruptive activities or habitat alteration within this buffer Have a biological monitor that is familiar with the species' biology present on the project site during all construction or earth moving activities until the chicks/ducklings fledge to ensure that Hawaiian waterbirds and nests are not adversely impacted.</p> <p>Hawaiian seabirds Hawaiiaian seabirds may traverse the project area at night during the breeding, nesting, and fledging seasons (March 1 to December 15). Outdoor night lighting can cause seabird disorientation, fallout, and injury or mortality when seabirds are attracted to lights and after circling the lights, they may become exhausted and collide with nearby wires, buildings, or other structures or they may land on the ground. Fledglings are particularly vulnerable to light attraction when they are traversing the project area between September 15 and December 15, as they are making their first flights from their mountain nests to the sea. Downed seabirds are subject to increased mortality due to collision with automobiles, starvation, and predation by dogs, cats, and other predators. To avoid and minimize potential project impacts to seabirds we recommend you</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>incorporate the following measures into your project description: • Fully shield all outdoor lights so the bulb can only be seen from below. • Install automatic motion sensor switches and controls on all outdoor lights or turn off lights when human activity is not occurring in the lighted area. • Avoid nighttime construction during the seabird fledging period, September 15 through December 15. Hawaiian sea turtles The Service consults on sea turtles and their use of terrestrial habitats (beaches where nesting and/or basking is known to occur), whereas the National Oceanic and Atmospheric Administration (NOAA) Fisheries consults on sea turtles in aquatic habitats. We recommend that you consult with NOAA Fisheries regarding the potential impacts from the proposed project if it may affect offshore or open ocean habitats. Green sea turtles may nest on any sandy beach area in the Pacific Islands. Hawksbill sea turtles exhibit a wide tolerance for nesting substrate (ranging from sandy beach to crushed coral) with nests typically placed under vegetation. Both species exhibit strong nesting site fidelity. Nesting occurs on beaches from May through September, peaking in June and July, with hatchlings emerging through November and December. Construction on, or in the vicinity of, beaches can result in sand and sediment compaction, sea turtle nest destruction, beach erosion, contaminant and nutrient runoff, and an increase in direct and ambient light pollution which may disorient hatchlings or deter nesting females. Off-road vehicle traffic may result in direct impacts to sea turtles or nests, and also contributes to habitat degradation through erosion and compaction. To avoid and minimize project impacts to sea turtles and their nests we recommend you incorporate the following measures into your project description: • No vehicle use on or modification of the beach/dune environment during the sea turtle nesting or hatching season (May to December). • Do not remove native dune vegetation. • Incorporate applicable best management practices regarding Work in Aquatic Environments (see</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>enclosed) into the project design. • Have a biologist familiar with sea turtles conduct a visual survey of the project site to ensure no basking sea turtles are present. o If a basking sea turtle is found within the project area, cease all mechanical or construction activities within 100 feet until the animal voluntarily leaves the area. o Cease all activities between the basking turtle and the ocean. • Remove any project-related debris, trash, or equipment from the beach or dune if not actively being used. • Do not stockpile project-related materials in the intertidal zone, reef flats, sandy beach and adjacent vegetated areas, or stream channels. Optimal sea turtle nesting habitat is a dark beach free of barriers that restrict sea turtle movement. Nesting turtles may be deterred from approaching or laying successful nests on lighted or disturbed beaches. They may become disoriented by artificial lighting, leading to exhaustion and placement of a nest in an inappropriate location (such as at or below the high tide line). Hatchlings that emerge from nests may also be disoriented by artificial lighting. Inland areas visible from the beach should be sufficiently dark to allow for successful navigation by hatchlings to the ocean. To avoid and minimize project impacts to sea turtles from lighting we recommend incorporating the following applicable measures into your project description: • Avoid nighttime work during the nesting and hatching season (May to December). • Minimize the use of lighting on or near beaches and shield all project-related lights so the light is not visible from any beach. o If lights can't be fully shielded or if headlights must be used, fully enclose the light source with light filtering tape or filters. • Incorporate design measures into the construction or operation of buildings adjacent to the beach to reduce ambient outdoor lighting such as: o tinting or using automatic window shades for exterior windows that face the beach; o reducing the height of exterior lighting to below 3 feet and pointed downward or away from the beach; and o minimize light intensity to the lowest level feasible and, when possible, include timers and motion sensors.</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Blackburn’s sphinx moth The adult Blackburn’s sphinx moth feeds on nectar from native plants, including beach morning glory (<i>Ipomoea pes-caprae</i>), ‘ilie’e (<i>Plumbago zeylanica</i>), maiapilo (<i>Capparis sandwichiana</i>), and others. Blackburn’s sphinx moth larvae feed on non-native tree tobacco (<i>Nicotiana glauca</i>). and native ‘aiea (<i>Nothocestrum</i> spp.). To pupate, the larvae burrow into the soil and can remain in a state of torpor for a year or more before emerging from the soil. Soil disturbance can result in death of the pupae. The DEIS reported that field surveys conducted in 2021 by AECOS biologists did not find any host plants species for the moth. The Service does recommend conducting pre-construction surveys as the non-native tree tobacco is commonly found throughout the North Kona area and often establishes in disturbed areas, such as construction sites. We offer the following survey recommendations to assess whether the Blackburn’s sphinx moth occurs within the project area:</p> <ul style="list-style-type: none"> <li>• A biologist familiar with the species should survey areas of proposed activities for Blackburn’s sphinx moth and its larval host plants prior to work initiation.</li> <li>o Surveys should be conducted during the wettest portion of the year (usually November-April or several weeks after a significant rain) and within 4-6 weeks prior to construction.</li> <li>o Surveys should include searches for adults, eggs, larvae, and signs of larval feeding (chewed stems, frass, or leaf damage).</li> <li>o If moths, eggs, larvae, or native ‘aiea or tree tobacco over 3 feet tall, are found during the survey, please contact the Service for additional guidance to avoid impacts to this species. If no Blackburn’s sphinx moth, ‘aiea, or tree tobacco are found during surveys, it is imperative that measures be taken to avoid attraction of Blackburn’s sphinx moth to the project location and prohibit tree tobacco from entering the site. Tree tobacco can grow greater than 3 feet tall in approximately 6 weeks. If it grows over 3 feet, the plants may become a host plant for Blackburn’s sphinx moth. We therefore recommend that you:</li> <li>• Remove any tree tobacco less than 3 feet tall.</li> <li>• Monitor the site every 4-</li> </ul>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
6 weeks for new tree tobacco growth before, during, and after the proposed ground-disturbing activity. o Monitoring for tree tobacco can be completed by any staff, such as groundskeeper or regular maintenance crew, provided with picture placards of tree tobacco at different life stages.		
<p>The Bungalow Resort WILL have a Much Needed Positive IMPACT on the Keauhou Bay and does NOT hurt or impair the very healthy Keauhou Bay ocean ecosystem.</p> <p>Habitat Health at Keauhou Bay:</p> <p>Please, DO NOT believe the detractors of the development who claim the development will pollute, endanger specie and create greater congestion in the area. The bay is a very resilient body of water with natural ocean wave action keeping the bay clean and healthy for humans, ocean organisms and habitats. The bay over the past 25 years I've worked here, has not shown signs of degradation as would be predicted if what detractors say was true about runoff, pollution and harm to sea turtles and monk seals. The Keauhou Bay is not home to many green sea turtles or monk seals - they are very rare in this bay. Yet resort detractors claim these endangered species will be harmed if the resort built. This is a weak and unsupported claim as anyone who visits the bay knows. This is simply not a regular habitat of either turtles or monk seals and never has been one.</p> <p>Keauhou Bay is in fact a clean environment where swimmers exercise, tourists and local residents view manta rays and enjoy the bay by kayak, boat and canoe for snorkeling, diving and fishing. The bay waters are circulated hourly with fresh ocean waters and this keeps the bay environment clean and healthy for all things biological. If what the detractors say of this new resort development was true, then we would currently see very sick dolphins, ailing manta rays, polluted monk seals, tumor infested green sea turtles and reduced plankton populations and serious coral</p>	G Hand	The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
issues. But we are not experiencing a decline in species or their health.		
<p>Attachment A: Invasive Species Biosecurity Protocols: Hawai'i Island Biosecurity Protocols The following biosecurity protocol (based on National Park Service, State of Hawai'i, U.S. Fish and Wildlife, U.S. Geological Survey, and the DOI Office of Native Hawaiian Relations guidance) should be followed when operating on Hawai'i Island to prevent the introduction of harmful invasive species including frogs, ants, weeds, and fungi into local natural areas (e.g., Hawai'i Volcanoes National Park, Hakalau Forest National Wildlife Refuge, State of Hawai'i "Natural Areas") and areas with native habitat (habitat that is primarily composed of native vegetation), other islands in Hawaiian archipelago, or the U.S. mainland. The protocol also includes suggestions for keeping field staff safe from certain invasive species.</p> <p>1. All work vehicles, machinery, and equipment should be cleaned, inspected by its user, and found free of mud, dirt, debris and invasive species prior to entry into the natural areas or native habitat. a. Vehicles, machinery, and equipment must be thoroughly pressure washed in a designated cleaning area and visibly free of mud, dirt, plant debris, insects, frogs (including frog eggs) and other vertebrate species such as rats, mice and non-vegetative debris. A hot water wash is preferred. Areas of particular concern include bumpers, grills, hood compartments, areas under the battery, wheel wells, undercarriage, cabs, and truck beds (truck beds with accumulated material (intentionally placed or fallen from trees) are prime sites for hitchhikers). b. The interior and exterior of vehicles, machinery, and equipment must be free of rubbish and food. The interiors of vehicles and the cabs of machinery must be vacuumed clean. Floor mats shall be sanitized with a solution of &gt;70% isopropyl alcohol or a freshly mixed 10% bleach solution. c. Any machinery, vehicles, equipment, or other supplies found to be infested with ants (or other</p>	<p>Colleen Cole (US Fish and Wildlife Service, Pacific Islands Fish and Wildlife Office)</p>	<p>Mahalo for providing the recommended mitigation measures. Your comments have been administratively recorded and incorporated where appropriate in Section 4.6 of the Final EIS.</p> <p>The proposed development at Keauhou Bay is designed to be in harmony with the existing ecosystem, and significant measures will be taken to protect the bay and its surrounding environment. Kamehameha Schools recognizes the importance of preserving native habitats, including the protection of endangered species and the prevention of invasive species. As such, construction activities will adhere to applicable State and County standards for biosecurity protocols to prevent the introduction of harmful species, including little fire ants, invasive fungi, and other pests. This includes thorough cleaning and inspection of all vehicles, machinery, and equipment before entering the project area, as well as the implementation of appropriate pest control measures.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>invasive species) must not enter natural areas or native habitat. Treatment is the responsibility of the equipment or vehicle owner and operator.</p> <p>2. Little Fire Ants – All work vehicles, machinery, and equipment should be inspected for invasive ants prior to entering the natural areas or native habitat. a. A visual inspection for little fire ants should be conducted prior to entry into natural areas or native habitat. b. Hygiene is paramount but even the cleanest vehicle can pick up a little fire ant. Place MaxForce Complete Brand Granular Insect Bait (1.0% HydramethylInon; <a href="http://littlefireants.com/Maxforce%20Complete.pdf">http://littlefireants.com/Maxforce%20Complete.pdf</a>) into refillable tamper resistant bait stations. An example of a commercially available refillable tamper resistant bait station is the Ant Café Pro (<a href="https://www.antcafe.com/">https://www.antcafe.com/</a>). Place a bait station (or stations) in vehicle. Note larger vehicles, such as trucks, may require multiple stations. Monitor bait stations frequently (every week at a minimum) and replace bait as needed. If the station does not have a sticker to identify the contents, apply a sticker listing contents to the station. c. Any machinery, vehicles, equipment, or other supplies found to be infested with ants (or other invasive species) must not enter natural areas or native habitat until it is sanitized and re-tested following a resting period. Infested vehicles must be sanitized following recommendations by the Hawaii Ant Lab (<a href="http://www.littlefireants.com/">http://www.littlefireants.com/</a>) or other ant control expert and in accordance with all State and Federal laws. Treatment is the responsibility of the equipment or vehicle owner. d. Gravel, building materials, or other equipment such as portable buildings should be baited using MaxForce Complete Brand Granular Insect Bait (1.0% HydramethylInon; <a href="http://littlefireants.com/Maxforce%20Complete.pdf">http://littlefireants.com/Maxforce%20Complete.pdf</a>) or AmdroPro (0.73% HydramethylInon; <a href="http://littlefireants.com/Amdro%20Pro.pdf">http://littlefireants.com/Amdro%20Pro.pdf</a>) following label guidance. e. Storage areas that hold field tools, especially tents, tarps, and clothing should be baited using MaxForce</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Complete Brand Granular Insect Bait (1.0% Hydramethylnon; <a href="http://littlefireants.com/Maxforce%20Complete.pdf">http://littlefireants.com/Maxforce%20Complete.pdf</a>) or AmdroPro (0.73% Hydramethylnon; <a href="http://littlefireants.com/Amdro%20Pro.pdf">http://littlefireants.com/Amdro%20Pro.pdf</a>) following label guidance.</p> <p>3. Base yards and staging areas inside and outside areas must be kept free of invasive species. a. Base yards and staging areas should be inspected at least weekly for invasive species, and any found invasive removed immediately. Pay particular attention to where vehicles are parked overnight, keeping areas within 10-meters of vehicles free of debris. Parking on pavement and not under trees, while not always practical is best. b. Project vehicles or equipment stored outside of a base yard or staging area, such as a private residence, should be kept in a pest free area.</p> <p>4. All cutting tools must be sanitized to prevent the Rapid 'Ōhi'a Death (ROD) fungus. a. Avoid wounding 'ōhi'a trees and roots with mowers, chainsaws, weed eaters, and other tools. Cut only the minimum number of trees and branches as approved for the project. b. All cutting tools, including machetes, chainsaws, and loppers must be sanitized to remove visible dirt and other contaminants prior to entry into natural areas or areas with native habitat, and when moving to a new project area within the native habitat area. Tools may be sanitized using a solution of &gt;70% isopropyl alcohol or a freshly mixed 10% bleach solution. One minute after sanitizing, you may apply an oil based lubricant to chainsaw chains or other metallic parts to prevent corrosion. c. Only dedicated tools and chainsaws should be used to sample known or suspected ROD infected trees. d. Vehicles, machinery, and equipment must be cleaned as described in (1) above.</p> <p>5. Imported firewood, logs, and 'ōhi'a parts: a. 'Ōhi'a firewood, 'ōhi'a logs, and 'ōhi'a parts should not be transported. 6. For individuals working in the field: a. Before</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>going into the field, visually inspect and clean your clothes, boots, pack, radio harness, tools and other personal gear and equipment, for seeds, soil, plant parts, insects, and other debris. A small brush is handy for cleaning boots, equipment and gear. Soles of shoes should be sanitized using a solution of &gt;70% isopropyl alcohol or a freshly mixed 10% bleach solution. b. Immediately before leaving the field, visually inspect and clean your clothes, boots, pack, radio harness, tools, and other personnel gear and equipment, for seeds, soil, plant parts, insects, and other debris. Soles of shoes should be sanitized using a solution of &gt;70% isopropyl alcohol or a freshly mixed 10% bleach solution. c. Little fire ants nest in trees. If you are under a tree and that tree is bumped or somehow stressed, the threat response of the ants is to fall from the leaves and sting the person under the tree. If you are subject to an ant attack, do not panic. The ants are extremely small, but their stings are painful so make sure you remove all ants from your body and clothing. The stings cause inch long welts that are itchy and painful and can last for weeks. Treat stings as you would other insect stings. In some persons stings can produce life threatening reactions. Stocking antihistamine in the first aid kit is a reasonable precaution. d. Rat Lungworm disease is caused by a parasite that can infect humans who consume raw or undercooked infected snails or slugs or consume raw produce that contains a small infected snail or slug. Infection is rare but can be serious. Symptoms can include severe headache, neck stiffness, low grade fever, nausea, and vomiting anywhere from 1-6 weeks after exposure. The disease is not spread person to person. Anyone who handles snails or slugs should wear gloves and/or wash hands. Eating unwashed produce is discouraged.</p>		
<p>*Within Keauhou Bay waters exist significant spots measuring cool temperatures due to cold water entry from higher elevations. These cooler 'patchwork' are critical for</p>	<p>Rollin Stonebraker-Soles</p>	<p>The Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts on marine life were identified in the EIS.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
marine life. How would development affect current water temperatures from spot to spot within the Bay?		EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project integrates Low-Impact Development (LID) principles to manage stormwater through strategies that replicate natural hydrological processes. These practices, such as infiltration and retention systems, will reduce runoff and support localized water recharge. Impacts to the water table and ability for groundwater to discharge to the bay are not anticipated. As such, water temperatures in the bay are not anticipated to change as a result of the Project.
<b>Noise</b>		
Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development? Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behaviour of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished." What is ocean noise? "Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean. Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other. Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats. These rising noise	Donald Robert Berger Stephen Goudreau Sara Irwin Goudreau Lucia Kaplan Rebecca Melendez Sherina Ong Roslyn Patrick-Sunnes Deborah Sevy Mayari Sherina Ong Lisa Thatcher David Hill Kaleihua Kamaka Kellie Kilcua	The Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts on marine life were identified in the EIS.  Section 4.13 of the EIS addresses potential noise impacts associated with the KBMP, supported by a detailed Noise Assessment included in Appendix O. The assessment evaluates both short-term and long-term noise conditions. Short-term impacts may result from construction-related activities, which could temporarily affect nearby residences and uses due to increased frequency and exposure to noise. Long-term impacts could include increased noise from traffic, commercial operations, and cultural or educational programming within the Project Area.  While future noise levels are expected to increase slightly due to construction and traffic, the assessment concludes that overall noise levels will remain within acceptable thresholds. The most notable increases, ranging from 11 to 13 dB, are projected in currently undeveloped areas along Old Kona Road but are not anticipated to exceed FHA/HUD standards of 65 DNL or the Hawai'i Department of Transportation's significant increase criterion of 15 dB. The Project will comply with local Department of Health noise regulations to avoid adverse impacts.  Risks of noise impacts on marine species are considered to be negligible as offshore construction is not proposed.

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats."</p>	<p>William Lim                      Jenni Lund                      Alicia Morrier                      Belinda Pate                      Jo Quinn                      Jason Rigmaiden                      Bryn Stites                      Wim Verkaok                      Jyn Watson                      Keana Dawson                      Celia Murry                      Riley Reynolds                      Sharron Rudolph                      Curt and Ellen                      Winningham</p>	
<p>Ali'i Drive and Kaleiopapa St. traffic is already noisy and dangerous as drivers violate speed limits continuously. The addition of even more resorts only increases the issues of affordability for local Hawaiians and residents who struggle with housing, high energy costs and goods and services priced out of their reach.</p> <p>It will also displace an important gathering place for the young people of the island who are learning canoeing through the keauhou bay canoe club. Please stop this project.</p> <p>It is not needed, will over populate an area already ill-equipped to handle traffic noise and volume, and destroy the tranquility of the area.</p>	<p>Lisa Sterritt</p>	<p>Appendix M to the DEIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The report includes forecasted traffic conditions with the implementation of the Project. The traffic analysis shows that the addition of project-generated traffic would not result in any significant roadway operations impacts under typical peak hour conditions.</p> <p>It is important to note that Ali'i Drive and Kaleiopapa Street are owned by the County, not Kamehameha Schools. As such, any pedestrian safety improvements, such as the installation of speed bumps or lowering the speed limit, would need to be initiated and carried out by the County. Kamehameha Schools can only regulate and manage aspects within the boundaries of the Project Area itself..</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>Section 4.13 of the EIS addresses potential noise impacts associated with the KBMP, supported by a detailed Noise Assessment included in Appendix O. The assessment evaluates both short-term and long-term noise conditions. Short-term impacts may result from construction-related activities, which could temporarily affect nearby residences and uses due to increased frequency and exposure to noise. Long-term impacts could include increased noise from traffic, commercial operations, and cultural or educational programming within the Project Area. Risks of noise impacts on marine species are considered to be minimal as offshore construction is not proposed.</p> <p>While future noise levels are expected to increase slightly due to construction and traffic, the assessment concludes that overall noise levels will remain within acceptable thresholds. The most notable increases, ranging from 11 to 13 dB, are projected in currently undeveloped areas along Old Kona Road but are not anticipated to exceed FHA/HUD standards of 65 DNL or the Hawai'i Department of Transportation's significant increase criterion of 15 dB. The Project will comply with local Department of Health noise regulations to avoid adverse impacts.</p> <p>The Project does not involve the development of new residential housing units. The additional jobs and incomes associated with the Project would contribute to residents' ability to pay for housing needs. A housing alternative is considered in the EIS however, housing uses would require more parking and infrastructure demands than low-impact lodging uses and would thereby result in increased traffic-related impacts and potentially utility demands. Due to the location and topography, the construction of housing units would be comparatively much more expensive to build, limiting their affordability for local residents in the region. Table 6-1 of the EIS provides a detailed evaluation of the Housing Alternative.</p> <p>The KBMP will not displace people from shoreline use or prevent access for canoe activities as suggested. Kamehameha Schools, through the KBMP, specifically recognizes and supports the continuation of canoe activities at Keauhou Bay. Public shoreline access will not be restricted; rather, it will be enhanced through the</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		creation of new accessible walking paths and expanded open spaces at Ka'ili'ilinehe Beach Park.
If you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behaviour of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished." The above information was taken from the Ocean Conservation Trust <a href="https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/">https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/</a>	Rebecca Melendez Robert Gay Donna Cherrier	<p>The Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts on marine life were identified in the EIS.</p> <p>Section 4.13 of the EIS addresses potential noise impacts associated with the KBMP, supported by a detailed Noise Assessment included in Appendix O. The assessment evaluates both short-term and long-term noise conditions. Short-term impacts may result from construction-related activities, which could temporarily affect nearby residences and uses due to increased frequency and exposure to noise. Long-term impacts could include increased noise from traffic, commercial operations, and cultural or educational programming within the Project Area. Risks of noise impacts on marine species are considered to be minimal as offshore construction is not proposed.</p> <p>While future noise levels are expected to increase slightly due to construction and traffic, the assessment concludes that overall noise levels will remain within acceptable thresholds. The most notable increases, ranging from 11 to 13 dB, are projected in currently undeveloped areas along Old Kona Road but are not anticipated to exceed FHA/HUD standards of 65 DNL or the Hawai'i Department of Transportation's significant increase criterion of 15 dB. The Project will comply with local Department of Health noise regulations to avoid adverse impacts.</p> <p>Risks of noise impacts on marine species are considered to be negligible as offshore construction is not proposed.</p>
We are concerned about additional noise from effectively moving the retail operations in the area closer to the only two residential properties on Ehukai St. Although the Outrigger hosts wedding right next to our property, there are very good about ensuring all noise stops by 10 PM. Manta Ray tours currently run past 10 PM. We want to ensure that the residential 10 PM quiet hours will still be observed.	Peter McCormick	Section 4.13 of the EIS addresses potential noise impacts associated with the KBMP, supported by a detailed Noise Assessment included in Appendix O. The assessment evaluates both short-term and long-term noise conditions. Short-term impacts may result from construction-related activities, which could temporarily affect nearby residences and uses due to increased frequency and exposure to noise. Long-term impacts could include

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>increased noise from traffic, commercial operations, and cultural or educational programming within the Project Area. Risks of noise impacts on marine species are considered to be minimal as offshore construction is not proposed.</p> <p>While future noise levels are expected to increase slightly due to construction and traffic, the assessment concludes that overall noise levels will remain within acceptable thresholds. The most notable increases, ranging from 11 to 13 dB, are projected in currently undeveloped areas along Old Kona Road but are not anticipated to exceed FHA/HUD standards of 65 DNL or the Hawai'i Department of Transportation's significant increase criterion of 15 dB. The Project will comply with local Department of Health noise regulations to avoid adverse impacts.</p>
<p>Noise Impacts The DEIS fails to adequately address noise impacts from the Project. The majority of the project will remove historically forested areas, from which the only noises emanating are natural sounds. There are no studies of the existing noise levels in the area or studies of what increased noise impacts to the area will be, except statements that are made without any supporting evidence. It is obvious that the Project will alter existing conditions related to noise via a large increase in human and motorized activity in and around the Bay.</p>	Jennie Shield	<p>Section 4.13 of the EIS addresses potential noise impacts associated with the KBMP, supported by a detailed Noise Assessment included in Appendix O. The assessment evaluates both short-term and long-term noise conditions. Short-term impacts may result from construction-related activities, which could temporarily affect nearby residences and uses due to increased frequency and exposure to noise. Long-term impacts could include increased noise from traffic, commercial operations, and cultural or educational programming within the Project Area. Risks of noise impacts on marine species are considered to be minimal as offshore construction is not proposed.</p> <p>While future noise levels are expected to increase slightly due to construction and traffic, the assessment concludes that overall noise levels will remain within acceptable thresholds. The most notable increases, ranging from 11 to 13 dB, are projected in currently undeveloped areas along Old Kona Road but are not anticipated to exceed FHA/HUD standards of 65 DNL or the Hawai'i Department of Transportation's significant increase criterion of 15 dB. The Project will comply with local Department of Health noise regulations to avoid adverse impacts.</p>
<p>The EIS Fails To Address Noise Impacts From The Project                      The Project purports to build a large resort, commercial</p>	Jeff Caufield	<p>Section 4.13 of the EIS addresses potential noise impacts associated with the KBMP, supported by a detailed Noise</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>center, cultural center and commercial kiosks. The majority of the project will tear out historically forested areas for which the only noise being generated is by natural flora and fauna and replace it with a resort and new road. There is NO study of the existing noise levels in the area. There is NO analysis of what increased noise impacts to the area will be from the Project other than conclusory statements that are without supporting evidence and/or study. Obviously, the Project will materially change existing conditions related to noise through a substantial increase in activity around the bay. (Potentially adding thousands of new visitors and vehicle noise to the bay area on a daily basis.) An noise study must be conducted to analyze existing noise levels and potential future noise levels.</p>		<p>Assessment included in Appendix O. The assessment evaluates both short-term and long-term noise conditions. Short-term impacts may result from construction-related activities, which could temporarily affect nearby residences and uses due to increased frequency and exposure to noise. Long-term impacts could include increased noise from traffic, commercial operations, and cultural or educational programming within the Project Area. Risks of noise impacts on marine species are considered to be minimal as offshore construction is not proposed.</p> <p>While future noise levels are expected to increase slightly due to construction and traffic, the assessment concludes that overall noise levels will remain within acceptable thresholds. The most notable increases, ranging from 11 to 13 dB, are projected in currently undeveloped areas along Old Kona Road but are not anticipated to exceed FHA/HUD standards of 65 DNL or the Hawai'i Department of Transportation's significant increase criterion of 15 dB. The Project will comply with local Department of Health noise regulations to avoid adverse impacts.</p>
<p>Since the traffic forecasts are erroneous, all air quality and noise analysis are also in error. The noise disruption from traffic along Kamehameha III Road is already disruptive. As noted above, the majority of both background traffic volume and project generated traffic volume will use Kamehameha III Road. Traffic congestion, noise (duration and intensity), and air quality impacts will significantly worsen, particularly for residents adjacent to this section of the road. We request that Air Quality and Noise studies be revised to reflect the significant shift in traffic volume associated with the development and through road connection that is part of the proposed action. In summary, we request that a Supplemental DEIS be prepared for public review to address an updated traffic analysis addressing the items noted above, any associated Noise and Air Quality analyses, and other non-traffic issues.</p>	David Markley	<p>Section 4.13 of the EIS addresses potential noise impacts associated with the KBMP, supported by a detailed Noise Assessment included in Appendix O. The assessment evaluates both short-term and long-term noise conditions. Short-term impacts may result from construction-related activities, which could temporarily affect nearby residences and uses due to increased frequency and exposure to noise. Long-term impacts could include increased noise from traffic, commercial operations, and cultural or educational programming within the Project Area. Risks of noise impacts on marine species are considered to be minimal as offshore construction is not proposed.</p> <p>While future noise levels are expected to increase slightly due to construction and traffic, the assessment concludes that overall noise levels will remain within acceptable thresholds. The most notable increases, ranging from 11 to 13 dB, are projected in currently undeveloped areas along Old Kona Road but are not anticipated to exceed FHA/HUD standards of 65 DNL or the Hawai'i Department of Transportation's significant increase</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		criterion of 15 dB. The Project will comply with local Department of Health noise regulations to avoid adverse impacts.
And a concern that cannot be addressed in the DEIS is the noise level during construction and rebuilding of the parking lot and Old Kona Road as it is directly across the street from our building and the addition of kiosks for commercial use directly across the street of our building.	Joanne (Jody) Wheeler	<p>Section 4.13 of the EIS addresses potential noise impacts associated with the KBMP, supported by a detailed Noise Assessment included in Appendix O. The assessment evaluates both short-term and long-term noise conditions. Short-term impacts may result from construction-related activities, which could temporarily affect nearby residences and uses due to increased frequency and exposure to noise. Long-term impacts could include increased noise from traffic, commercial operations, and cultural or educational programming within the Project Area. Risks of noise impacts on marine species are considered to be minimal as offshore construction is not proposed.</p> <p>While future noise levels are expected to increase slightly due to construction and traffic, the assessment concludes that overall noise levels will remain within acceptable thresholds. The most notable increases, ranging from 11 to 13 dB, are projected in currently undeveloped areas along Old Kona Road but are not anticipated to exceed FHA/HUD standards of 65 DNL or the Hawai'i Department of Transportation's significant increase criterion of 15 dB. The Project will comply with local Department of Health noise regulations to avoid adverse impacts.</p>
With regard to noise, the DEIS states: "The noise levels around Keauhou Bay are consistent with noise levels found in typical urban areas." (DEIS at 4.13) However, to reiterate--the project area is not urban. Thus, the results of the noise study performed are inapplicable here. Possible mitigation measures include foregoing the construction of a 150-unit resort, performing traffic studies and ambient noise level studies at the busiest times of the year that accurately address the impacts on adjacent neighborhoods and streets.	Tamyra Rice	<p>According to the State Land Use Designation Map (Figure 1-4), the entire Project Area and its surrounding vicinity are designated as Urban. This designation reflects an area primarily characterized by a mix of residential, apartment, condominium, retail, and resort developments. The project is in alignment with the established urban landscape and is consistent with the goals and planning objectives for urban development in this area.</p> <p>Section 4.13 of the EIS addresses potential noise impacts associated with the KBMP, supported by a detailed Noise Assessment included in Appendix O. The assessment evaluates both short-term and long-term noise conditions. Short-term impacts may result from construction-related activities, which could temporarily affect nearby residences and uses due to increased</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>frequency and exposure to noise. Long-term impacts could include increased noise from traffic, commercial operations, and cultural or educational programming within the Project Area. Risks of noise impacts on marine species are considered to be minimal as offshore construction is not proposed.</p> <p>While future noise levels are expected to increase slightly due to construction and traffic, the assessment concludes that overall noise levels will remain within acceptable thresholds. The most notable increases, ranging from 11 to 13 dB, are projected in currently undeveloped areas along Old Kona Road but are not anticipated to exceed FHA/HUD standards of 65 DNL or the Hawai'i Department of Transportation's significant increase criterion of 15 dB. The Project will comply with local Department of Health noise regulations to avoid adverse impacts.</p> <p>The DEIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action. Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p>
<p>My unit is within 20 feet of the Ali'i Dr roadway, and this extra noise and pollution will greatly impact me. I suggest erecting permanent sound barriers along Ali'i and Kaleiopapa St by our condo complex for the noise, and limiting construction activities to weekdays and conventional work hours</p>	<p>Marjorie Bryant</p>	<p>Section 4.13 of the EIS addresses potential noise impacts associated with the KBMP, supported by a detailed Noise Assessment included in Appendix O. The assessment evaluates both short-term and long-term noise conditions. Short-term impacts may result from construction-related activities, which could temporarily affect nearby residences and uses due to increased frequency and exposure to noise. Long-term impacts could include increased noise from traffic, commercial operations, and cultural or educational programming within the Project Area. Risks of noise impacts on marine species are considered to be minimal as offshore construction is not proposed.</p> <p>While future noise levels are expected to increase slightly due to construction and traffic, the assessment concludes that overall noise levels will remain within acceptable thresholds. The most notable increases, ranging from 11 to 13 dB, are projected in currently undeveloped areas along Old Kona Road but are not anticipated to exceed FHA/HUD standards of 65 DNL or the</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>Hawai'i Department of Transportation's significant increase criterion of 15 dB. The Project will comply with local Department of Health noise regulations to avoid adverse impacts.</p> <p>The State DOH currently regulates noise from construction activities under a permit system. Under current permit procedures, noisy construction activities are restricted to hours between 7:00 a.m. and 6:00 p.m., from Monday through Friday, and exclude certain holidays. Noisy construction activities are normally restricted to the hours of 9:00 a.m. to 6:00 p.m. on Saturdays, with construction not permitted on Sundays. These restrictions minimize construction related noise impacts.</p>
<p><b>NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE</b>                  Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development? Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished." The above information was taken from the Ocean Conservation Trust  <a href="https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/">https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/</a> How Does Noise Pollution Harm Marine Species? "However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <a href="https://earth.org/noise-pollution-in-the-ocean/">https://earth.org/noise-pollution-in-the-ocean/</a>                  If you allow this resort the amount of people in this bay will</p>	<p>Michael Hanly</p>	<p>The Project does not propose any direct activities within the immediate nearshore areas of Keauhou Bay and no specific impacts on marine life were identified in the EIS.</p> <p>Section 4.13 of the EIS addresses potential noise impacts associated with the KBMP, supported by a detailed Noise Assessment included in Appendix O. The assessment evaluates both short-term and long-term noise conditions. Short-term impacts may result from construction-related activities, which could temporarily affect nearby residences and uses due to increased frequency and exposure to noise. Long-term impacts could include increased noise from traffic, commercial operations, and cultural or educational programming within the Project Area. Risks of noise impacts on marine species are considered to be minimal as offshore construction is not proposed.</p> <p>While future noise levels are expected to increase slightly due to construction and traffic, the assessment concludes that overall noise levels will remain within acceptable thresholds. The most notable increases, ranging from 11 to 13 dB, are projected in currently undeveloped areas along Old Kona Road but are not anticipated to exceed FHA/HUD standards of 65 DNL or the Hawai'i Department of Transportation's significant increase criterion of 15 dB. The Project will comply with local Department of Health noise regulations to avoid adverse impacts.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>fully increase and, "Hawai'i's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources What is ocean noise? "Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean. Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other. Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats. These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats."</p>		<p>Risks of noise impacts on marine species are considered to be negligible as offshore construction is not proposed.</p>
<b>EIS Process</b>		
<p>The April 2022 meeting was supposed to be a scoping meeting where community input was taken seriously. It was</p>	<p>Kathleen McMillen</p>	<p>Consultation is a requirement under Hawai'i Administrative Rules Section 11-200.1-23. Accordingly, all appropriate agencies noted</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>clear to me and many others present that KS had already made up their minds on the scope of the project and were only there because the meeting is a requirement of the EIS legal process. Volume II of the most recent Draft EIS Appendix A and B summarizes the public input at the 2022 meeting and the inadequate answers by KS. The latter part of Appendix B shows many comments of community individuals who disagreed with the proposed the project. Just about every single one of those comments was answered by KS with the exact same long boiler plate answer. That is so lazy on the part of KS and their consultant, but more importantly, insulting and disrespectful to the community. KS didn't even try to pretend to care what the community thought. I have seen better responses to proposed development in Kona from outside profit driven private developers.</p>		<p>in Section 11-200.1-23(b), including the county agency responsible for implementing the county's general plan, agencies having jurisdiction or expertise, and other citizen groups and concerned individuals, were consulted in preparation of the Draft EIS. The scoping meeting held in 2022 allowed for agencies and the public to assist Kamehameha Schools in determining the range of actions, alternatives, impacts, significant issues and proposed mitigation to be considered in the Draft EIS.</p> <p>Planning for the KBMP involved extensive stakeholder outreach beyond the statutory requirements for Environmental Impact Statements. Kamehameha Schools proactively engaged a wide range of stakeholders, including lineal descendants, cultural practitioners, community organizations, ocean users, nearby residents, commercial operators, educational groups, and government agencies. This approach reflected a commitment to building a management plan grounded in the values and needs of the community and the cultural significance of Keauhou Bay. A full detailing of consultation efforts and input received is provided in Chapter 7 of this document.</p>
<p>The EIS is a true sham filled with empty platitudes. Its BS. No more tourists! No more hotels!</p>	<p>Jun Sogi</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>The analysis presented to support the claims made in the DEIS is insufficient, therefore the DEIS should not be certified until substantial evidence to support these claims is provided in a supplemental DEIS to meet the requirements and rules of NEPA (CEQ Regulations (40 CFR 1502.9(b))) for certification</p>	Jennie Shield	<p>The Project does not involve a federal action, including the use of federal lands or funds. Therefore, the Project is not subject to the National Environmental Policy Act review process. The Project complies with the State of Hawai'i's requirements for environmental review and has been prepared in accordance with Hawai'i's Environmental Policy Act (HEPA), as established under Hawai'i Revised Statutes (HRS) Chapter 343 and Hawai'i Administrative Rules (HAR) Chapter 11-200.1.</p>
<p>The EIS Report Fails To Address Adequate Project Alternatives The EIS and the Project proponent infer that there is a "need" for greater economic development and use of the property. However, the EIS fails to disclose the current income levels from the current uses of the properties. Moreover, the EIS fails to address any "smaller" project alternatives. As everyone is aware, Project proponent has spent over a decade in construction of the Kahalu'u Ma Kai Project located on 22 acres nearby. (The hotel closed in 2012.) As that project historically operated a resort and was fully developed, logic would dictate that if Project proponent was concerned about income that property would an ideal location for a resort. Currently, there is apparently no economic use being made of the Kahalu'u Ma Ka property and very little use for educational purposes. According to the locals, the primary use appears to be for private barbeques and events for select locals connected to Project proponent. (Notably, there seems to be very little to anything "cultural" about 22 acres of non-native mowed bermuda grass, which is a post-european contact non-native species.) Accordingly, if the income from the Keauhou properties is such a great concern, where they are currently making money, and Kahalu'u Ma Kai is making zero income, shouldn't the project be built on Kahalu'u Ma Kai and a more limited project build at Keauhou? The EIS does NOT explore that alternative. Moreover, across the street from Kahalu'u Ma Kai is, from my understanding, a former "cultural center" and botanical garden that was closed by Project proponent and</p>	Jeff Caufield	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana. The EIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action. Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p> <p>Kamehameha Schools, as a private Native Hawaiian landowner, retains the right to use the lands endowed by Princess Bernice Pauahi Bishop in a manner that supports its mission and organizational needs. These lands may be utilized to the highest and best use as permitted under applicable regulations.</p> <p>The lands owned by Kamehameha Schools at Keauhou Bay are private lands, not public lands. Public access to these lands has historically been allowed voluntarily by Kamehameha Schools. However, providing this access has required Kamehameha Schools to absorb the full costs of maintenance, security, and operations typically associated with public parks, without the benefit of taxpayer funding or public subsidies.</p> <p>The current operational model at Keauhou Bay is financially unsustainable. Kamehameha Schools is not generating sufficient income from existing tenants to cover the costs associated with managing and maintaining the area. As a result, funds must be redirected from the institution's broader endowment to subsidize stewardship activities at Keauhou Bay. Reliable revenue generation is critical to support the ongoing management of community spaces, maintain safe access, protect natural</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>appears to generate zero income. The EIS fails to analyze a situation where the resort would be constructed on that property and a smaller project constructed on the Keauhou properties. Again, the EIS should consider reasonable alternatives where Project proponents use underutilized properties near the Keauhou properties, and a smaller project be built on the Keauhou properties. Conclusion It would be hard to find a more defective and deficient EIS. In the last 30+ years I've yet to see a more facially defective and deficient EIS. The EIS reads like an advertising brochure with a bunch of unsupported claims and conclusory statements. The EIS appears to be written with the goal of misleading the public and regulatory agencies rather than informing them of potential impacts and setting out appropriate mitigation measures. There were virtually no studies conducted of the existing environmental conditions at, near and/or inside Keauhou Bay. Most of the summary conclusory statements have zero evidentiary support. In fact, most statements related to project impacts appear by use of simply common sense to be likely untrue, misleading and false. The Project proponent has the burden to conduct adequate studies of existing conditions and provide an assessment of future conditions, which is has failed to even remotely attempt to do so. The EIS should also assess mitigation measures to reduce the project impacts, which can then be adopted as conditions to the Project approval. Thus, if the mitigation measures and maintenance requirements be adopted as conditions of approval, they become enforceable by the County. The County of Hawaii legally cannot "weigh" expert opinion in deciding whether to approve an EIS. As there are no studies to support the conclusions in the report and multiple expert opinions pointing out the deficiencies in the lack of appropriate studies, projections and mitigation measures the County cannot legally approve of the EIS as drafted.</p>		<p>resources, restore ecosystems, perform regular groundskeeping, conduct routine repairs and maintenance, and implement necessary improvements to facilities and infrastructure. Additionally, funding is essential to preserve significant cultural sites and expand cultural and educational programming envisioned under the KBMP.</p> <p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The location of the KBMP is ideal for the proposed low-impact lodging due to its existing land use designations and surrounding amenities. The Project Area is designated as Urban under the State Land Use District Map (Figure 1-4), which supports resort, retail, and mixed-use developments. The proposed low-impact lodging aligns with this established urban framework and supports the area's planned growth objectives. Additionally, the specific portion of the Project Area designated for lodging is zoned V-.75: Resort-Hotel District under the County of Hawai'i Zoning Code (Figure 1-6), making resort use a compatible and appropriate land use. The surrounding context, including the Outrigger Kona Resort and Spa, residential condominiums, the Kona Country Club golf course, the Keauhou Shopping Center, vacation rentals, and ocean recreation and tour operators, further reinforces the suitability of the site for a</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>low-impact lodging that complements and supports existing community and visitor-serving uses.</p> <p>The proposed lodging is intentionally designed as low-impact, with a low-profile and low-density layout that is well below the maximum development intensity allowed under current County of Hawai'i zoning. Rather than maximizing building heights, unit counts, or commercial intensity permitted in the V-75 Resort-Hotel District, the design emphasizes small-scale bungalow-style lodging that integrates with the surrounding cultural landscape.</p> <p>As noted, Kahalu'u Ma kai is located outside of the Project Area. An alternative for developing a lodging at Kahalu'u Ma Kai was not considered as it is outside the scope and would not meet the established Purpose and Need as set forth in Section 2.7 of the EIS. It is not a reasonable alternative to locate the KBMP outside of Keauhou Bay.</p>
I question whether some aspects of the plan align with this vision, specifically the plan to develop a resort adjacent to Keauhou Bay.	Orion McCarthy	<p>The KBMP is designed to reorganize the uses and activities within the bay to better reflect the cultural significance of the area and to support a more harmonious relationship between users, place, and purpose. Central to this reorganization is the concept of directing new growth to appropriate areas while preserving others, ensuring that future development does not come at the expense of cultural integrity or environmental health. To resolve long-standing conflicts between incompatible uses, the KBMP proposes relocating certain commercial operations, particularly those that are currently situated near sensitive cultural sites, to more suitable areas above the 'Ahu'ula cliff and along Kaleiopapa Street. By moving these uses away from the bayfront and heritage zones, the plan protects sacred spaces and allows for cultural practices to thrive without interference.</p>
Having worked in the medical field and precisely for Pfizer, I caution against the applicant doing its own EIS. This WILL be a disaster. Ever since pharmaceutical companies have been allowed to assess their own product safety (circa 1982), deaths and injuries from pharmacological interventions have skyrocketed. In other words, "properly prescribed"	Adrienne Hew	<p>The EIS was conducted pursuant to State of Hawai'i's requirements for environmental review and has been prepared in accordance with Hawai'i's Environmental Policy Act (HEPA), as established under Hawai'i Revised Statutes (HRS) Chapter 343 and Hawai'i Administrative Rules (HAR) Chapter 11-200.1.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>medications are the leading cause of death since at least the year 2000. An EIS MUST be done by an INDEPENDENT and truly neutral 3rd party, with no financial incentives to rule in one direction or another. If this is not done, Kamehameha Schools will be recognized as a pariah on the Hawaiian people and culture, with a leadership that considers its own personal leadership above the people and the 'aina. KS was once considered a beacon of hope, particularly where the environment is concerned, but perhaps those interested in doing so have been bought out by offshore funds.</p>		
<p>I appreciate the thorough review of public policy documents, clarity and transparency about goals in the KS Strategic Map for 2025, and good faith efforts to make community input an important part of the planning process. However, this plan fails on many levels. My focus here is the lack of consideration potentially superior alternatives for use of the mauka plot planned for a high end hotel. Many alternatives align better with the 2025 KS Strategic Map to “develop resilient economies, cultural landscapes, diverse learning and career pathways” - and get a return on investment in the process. The focus here is on economics and diverse learning.</p>	<p>Alice Ray</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan’s implementation can be self-sustaining. Long-term management of the bay’s natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The project is intended to strike a balance between economic growth and cultural stewardship. By focusing on low-impact lodging, the Project aims to generate revenue that directly supports educational initiatives and other community-focused programs. This approach is intended to support the long-term prosperity of the area while contributing to the overall vision laid out in the KS Strategic Map for 2025.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
I do not believe your environmental impact study goes far enough in addressing these issues. It appears to be only the bare minimum, and that feels very wrong from a company that is supposed to hold Hawaiian environmental sensibilities.	James Plant	The EIS was conducted pursuant to State of Hawai'i's requirements for environmental review and has been prepared in accordance with Hawai'i's Environmental Policy Act (HEPA), as established under Hawai'i Revised Statutes (HRS) Chapter 343 and Hawai'i Administrative Rules (HAR) Chapter 11-200.1.
<p>I do not believe that the alternatives suggested in this Draft EIS are genuinely suggested as potential alternatives. I believe that each is offered as a strategy to make your proposed development more palatable. And, as a scare tactic saying "doesn't 172- units sound better than 745- units, cuz we could do that ya know". And it is pushing the narrative that if "we" don't support the proposed development, "worse" could happen. Each of your alternatives suggest maximum development conditions, no lower-density alternatives are included aside from "no action" which suggests that as the landowner, KS will leave things to continue to be unmanaged, including the sacred sites identified. Please include a lower-density alternative. Here is a suggestion: Uncle Bobby Camara commented that instead of 1800 sf bungalows, look at small hale catered to local families and visitors for short-term rentals units. A smaller scale, more simple short-term rental development geared towards local people might have HALF the units, at 86-units. These could be very simple construction and priced at \$100/night with State ID for each guest. This would generate at least \$3M in revenue annually. If the goal is for this area to be self-sufficient and be able to sustain the cost of operation and maintenance, isn't \$3M enough? These types of lower density alternative should have been included.</p> <p>The document suggests that the landowner seeks to ensure that the long-term operation and maintenance does not take from resources meant for its educational spending, but the endowment for the trust is \$14.6B and last year alone the trust spent almost half a billion dollars. I do not believe that the funds needed to maintain the wahi pana and community</p>	Lillie Makaila	<p>Planning for the KBMP involved extensive stakeholder outreach beyond the statutory requirements for Environmental Impact Statements. Kamehameha Schools proactively engaged a wide range of stakeholders, including lineal descendants, cultural practitioners, community organizations, ocean users, nearby residents, commercial operators, educational groups, and government agencies. A full detailing of consultation efforts and input received is provided in Chapter 7 of this document.</p> <p>Kamehameha Schools, as a private Native Hawaiian landowner, retains the right to use the lands endowed by Princess Bernice Pauahi Bishop in a manner that supports its mission and organizational needs. These lands are not public lands and may be utilized by Kamehameha Schools as permitted under applicable regulations. Outreach efforts undertaken for the KBMP that extended beyond statutory requirements were voluntary, reflecting Kamehameha Schools' commitment to building a management plan grounded in the values, needs, and cultural significance of the Keauhou Bay community.</p> <p>In 2010, Kamehameha Schools initiated consultation with lineal descendants of Keauhou and Kahalu'u, which consultation continues today. During an early consultation meeting in the Fall of 2016, 'ohana of Keauhou and Kahalu'u shared concerns about long-standing issues in the area. They cited congestion, limited access, and the impact of inappropriate commercial and recreational activities that have eroded the bay's historical and cultural identity.</p> <p>Input from lineal descendants and the community guided the formation of the KBMP and identification of the plan's management strategies. Multiple listening sessions and project</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>spaces even compares to what is already spent by the trust. It is however the kuleana of the landowner to property steward its lands, and these are the costs of doing so.</p> <p>KS owns 364,000 acres across the pae 'āina, and stewardship of those lands is the kuleana of the landowner. Proposing that \$100M of resort and commercial development is a REQUIREMENT needed to maintain the lands at Keauhou is simply false. And as such, KS should reconsider these components of the proposed development and instead look for less impactful long-term uses that better support the community. Based on your breakdown of costs, instead of the proposed \$124M development, remove the proposed resort and commercial/retail/dining components, save yourself \$100M, and invest \$24M in appropriate stewardship and management of the 'āina at Keauhou.</p> <p>The consultation for this project appears to only be completed to “check a box” and does not meaningfully incorporate the concerns expressed by kūpuna and kama'āina. DEIS for the Keauhou Bay Management Plan Comment August 4, 2024 Page 3 of 3 A huge majority of the comments received are from folks who do not support the proposed resort and commercial development and ask for other alternatives that better support the local community. Meaningful consultation means that you will act on the major themes expressed by those you have consulted with and that their mana'o will be used to alter the plan as needed. You have not done this. The incorporation of the “Housing Alternative” is an excellent example of not meaningfully incorporating mana'o of participants. You took their suggestion to look at a housing alternative for local families needing homes, and looked at the highest density development option for housing. Meaningful exploration of the intention of that suggested alternative would have looked at low-density single-family homes or multi-family development at least of similar density to the proposed</p>		<p>updates, including presentations of concepts, were provided throughout the planning process.</p> <p>Under Hawai'i Administrative Rules Section 11-200.1-23, consultation is a required element prior to filing a Draft EIS. Kamehameha Schools complied with this requirement in preparation by consulting appropriate government agencies, citizen groups, and concerned individuals.</p> <p>An EISPN was published for the Project on March 23, 2022. As part of the consultation and public scoping process, a virtual community meeting and presentation was conducted on April 11, 2022. The scoping meeting served as an opportunity for the public and agencies to contribute ideas about the range of actions, alternatives, and mitigation measures to be studied. Publication of the EISPN was also followed by a 30-day public comment period. Substantive comments received were reviewed and considered as part of the DEIS.</p> <p>Commenters perspectives are important for shaping the final decision-making process, although submitting comments does not equate to voting for or against the project.</p> <p>Feedback received during the consultation process directly influenced the refinement of the KBMP. For example, community input guided the incorporation of sustainable tourism framework that emphasizes visitor experiences that actively contribute to the restoration and enhancement of Keauhou Bay's cultural, environmental, and community health. Strategies to honor historic trail alignments were also developed, with plans to recognize these important historical pathways through interpretive design and landscape improvements. In response to concerns about housing needs, a housing alternative was evaluated in the EIS, although ultimately dismissed due to potential environmental and feasibility challenges. Additionally, based on community feedback, the KBMP includes considerations to support the relocation of volleyball activities to a more appropriate alternate location.</p> <p>As part of the environmental review process, a Cultural Impact Assessment was developed by ASM Affiliates, and included in</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>resort development not looking at the highest possible build out. What a missed opportunity to really listen to those you have consulted and genuinely explore their suggested alternative.</p> <p>In light of the lack of meaningful effort put to potential alternatives, I find this DEIS incomplete and ask that you revise and try again. Perhaps more consultation would be a good thing, especially since the kūpuna who you relied on to complete your CIA have expressed in their comments their lack of support for the proposed resort and commercial development components as well.</p>		<p>Appendix H. Cultural resources were identified as vulnerable due to incompatible uses, commercial overreach, and lack of long-term management, prompting a need for proactive strategies to ensure their protection and revitalization. Upon implementation of the Project’s management goals, it is expected that cultural resources will be improved through preservation and stewardship measures and that opportunities for traditional practices will be expanded; thereby enhancing ancestral connection to place. The findings and recommendations from the Cultural Impact Analysis are detailed in Chapter 4.1 of the EIS.</p> <p>Alternatives to the Proposed Action are discussed in Chapter 6 of the EIS.</p> <p>The lands owned by Kamehameha Schools at Keauhou Bay are private lands, not public lands. Public access to these lands has historically been allowed voluntarily by Kamehameha Schools. However, providing this access has required Kamehameha Schools to absorb the full costs of maintenance, security, and operations typically associated with public parks, without the benefit of taxpayer funding or public subsidies.</p> <p>The current operational model at Keauhou Bay is financially unsustainable. Kamehameha Schools is not generating sufficient income from existing tenants to cover the costs associated with managing and maintaining the area. As a result, funds must be redirected from the institution’s broader endowment to subsidize stewardship activities at Keauhou Bay. This is viewed as unacceptable by Kamehameha Schools.</p> <p>Reliable revenue generation is critical to support the ongoing management of community spaces, maintain safe access, protect natural resources, restore ecosystems, perform regular groundskeeping, conduct routine repairs and maintenance, and implement necessary improvements to facilities and infrastructure. Additionally, funding is essential to preserve significant cultural sites and expand cultural and educational programming envisioned under the KBMP.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan’s implementation can be self-sustaining. Long-term management of the bay’s natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The proposed lodging is intentionally designed as low-impact, with a low-profile and low-density layout that is well below the maximum development intensity allowed under current County of Hawai’i zoning. Rather than maximizing building heights, unit counts, or commercial intensity permitted in the V-.75 Resort-Hotel District, the design emphasizes small-scale bungalow-style lodging that integrates with the surrounding cultural landscape.</p> <p>As mentioned, a housing alternative is considered in the EIS however, housing uses would require more parking and infrastructure demands than low-impact lodging uses and would thereby result in increased traffic-related impacts and utility demands. Due to the location and topography, the construction of housing units would be comparatively much more expensive to build, limiting their affordability for local residents in the region. Table 6-1 of the EIS provides a detailed evaluation of the Housing Alternative.</p> <p>The density of units was considered during the alternatives analysis. A low density development of single-family housing would not meet the Purpose and Need because it would not generate sufficient revenue to support the long-term management of the</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>Project Area. A housing density similar to or greater than the proposed low-impact lodging would also not meet the Purpose and Need, as the associated environmental impacts, infrastructure demands, and development costs would make it financially and operationally infeasible.</p> <p>The purpose of the EIS is to assess the potential impacts associated with the proposed maximum development allowed under the KBMP. This approach provides a comprehensive evaluation of environmental, cultural, and infrastructure considerations. A smaller-scale resort could be developed if Kamehameha Schools elects to pursue this option based on prevailing market conditions.</p>
<p>My personal experience at Keauhou Bay was one of enjoyment, but also disappointment at the state of the “beach” shoreline and marine biological resources thereby. On a cursory level, these appear degraded. Based on my visual observations, conditions dramatically improved toward the mouth of the Bay as one would expect with increasing water circulation, but the patter also suggests that existing developments adjacent to Ka’ili’ilinehe Beach impact the quality of marine biological resources. As noted above, my overall conclusion is that the DEIS lacks key basic foundational studies of existing conditions within the bay necessary to assess the potential impacts of the project, and the KBMP therefore also fails to assess potential mitigation measures appropriately. Finally, the KBMP makes statements regarding ‘sustainability,’ but is clearly focused on commercial development and an expanded footprint of development. While the Project might generally improve the human experience of cultural resources in particular (which I applaud), other sustainability elements of the KBMP are lacking, especially considering that the shoreline has already been highly modified by development and, in my opinion, has been in a state of degradation for decades. 2 Two parts of the KBMP provide documented cases of degradation:</p>	Nicholas Buhbe	<p>The current operational model at Keauhou Bay is financially unsustainable. Kamehameha Schools is not generating sufficient income from existing tenants to cover the costs associated with managing and maintaining the area. As a result, funds must be redirected from the institution’s broader endowment to subsidize stewardship activities at Keauhou Bay. Reliable revenue generation is critical to support the ongoing management of community spaces, maintain safe access, protect natural resources, restore ecosystems, perform regular groundskeeping, conduct routine repairs and maintenance, and implement necessary improvements to facilities and infrastructure. Additionally, funding is essential to preserve significant cultural sites and expand cultural and educational programming envisioned under the KBMP.</p> <p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
Section 2.3 of the document cites a 1954 account of Kauikeaouli's birth		<p>with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The proposed lodging is intentionally designed as low-impact, with a low-profile and low-density layout that is well below the maximum development intensity allowed under current County of Hawai'i zoning. Rather than maximizing building heights, unit counts, or commercial intensity permitted in the V-.75 Resort-Hotel District, the design emphasizes small-scale bungalow-style lodging that integrates with the surrounding cultural landscape.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>
In sum, the DEIS enumerates impacts and mitigation measures, but those are either inaccurate or only half of the story. The DEIS fails to contain: 1) an accurate description of the probable impacts of the project including the direct, indirect and cumulative impacts, as well as impacts on both the natural and human environments; 2) a sufficient statement of the unavoidable environmental impacts caused by the project and a rationale for proceeding with the project in light of these impacts; and 3) consideration of all mitigation measures proposed to avoid, minimize, rectify, or reduce the project's adverse impacts. (See Hawai'i Revised Statutes Chapters 343 and 344; Hawai'i Administrative Rules 11-200.1.)	Tamyra Rice	<p>The EIS was conducted pursuant to State of Hawai'i's requirements for environmental review and has been prepared in accordance with Hawai'i's Environmental Policy Act (HEPA), as established under Hawai'i Revised Statutes (HRS) Chapter 343 and Hawai'i Administrative Rules (HAR) Chapter 11-200.1.</p> <p>Chapter 4 the EIS describes the existing environmental conditions and discusses potential impacts of the Proposed Action. Strategies to minimize impacts and to mitigate any significant impacts are identified.</p> <p>Cumulative impacts associated with the KBMP are discussed in EIS Section 4.16.1. The Project's sustainable tourism model is expected to generate beneficial cumulative impacts by fostering a</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>respectful and reciprocal interaction between visitors, local communities, and the natural and cultural resources of Keauhou. By adhering to a coordinated development approach and complying with infrastructure and resource management standards, potential impacts are mitigated. Kamehameha Schools will continue collaboration with local utilities and agencies to address infrastructure needs and ensure that growth remains consistent with county and community planning efforts.</p> <p>Secondary impacts are addressed in EIS Section 4.16.2. These include indirect effects resulting from the Project’s implementation, such as increased visitation and associated demands on local services, which are anticipated to be managed through ongoing coordination and adherence to best management practices.</p> <p>Irreversible and irretrievable commitments of resources are discussed in EIS Section 4.16.4. These include the permanent dedication of land for development and the use of materials and energy resources during construction. Mitigation measures have been incorporated to minimize the extent of these commitments where practicable.</p> <p>Adverse environmental effects that cannot be avoided, despite mitigation, are presented in EIS Section 4.16.5. These include temporary construction-related impacts such as noise, dust, and limited disturbance to the existing landscape. These unavoidable effects are expected to be short-term and will be managed through appropriate BMPs.</p>
<p>Lack of Water Consumption Plan: The current Draft EIS does not provide sufficient information on Kamehameha Schools’ plan for water consumption. Given the severe drought conditions and recurring water restrictions in Kona, a detailed water management strategy is crucial for assessing the project’s feasibility and impact. Recommendation: The EIS should include a detailed water consumption plan outlining how the resort will source, use, and conserve water. This plan should address potential impacts on local water supplies and include mitigation measures to ensure</p>	<p>Alexis Kerver</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>that the development does not exacerbate water scarcity for residents. I understand you may read the above statement pertaining to water and think about the numerous operations in Kona already using limited water resources and say "everyone else is doing it why not us", however, for this exact reason it is every more pertinent that Kamehameha Schools leads by an example in the area of development and considers these broader impacts often overlooked by foreign developers more deeply. A precedent of over-development in coastal regions has already been set by existing development projects (for example, Hokuli'a and Kohanaiki). Kamehameha Schools has the opportunity to exemplify pono development and restore the area being considered for a bungalow resort to a native dryland forest that truly protects and preserves Keauhou Bay and provides meaningful opportunities for our youth. While the proposed bungalow resort development by Kamehameha Schools in Keauhou Bay may offer economic benefits, the removal of the vegetation buffer and the increased demand for water in an area already struggling with drought conditions are significant concerns. As established care-takers of 'āina with an endowment valued at 14.7 Billion (Google Financial, 2021), I trust that Kamehameha Schools and project leaders will 1) understand fully the potential irreversible environmental damage a resort development will have on Keauhou Bay, 2) deeply consider the "opportunities" this provides for our keiki and local residents, and 3) provide the community with a robust and complete EIS statement, including a SMA Permit Application, prior to making any decisions to move forward. I feel the Keauhou Bay Management Plan is well intentioned and mostly provides a great vision for reorganizing the existing activities and providing some new opportunities and revenue streams. I absolutely and firmly oppose the development of the bungalow resort and encourage Kamehameha Schools to reconsider this component of the plan. Mahalo for considering my commentary and recommendations.</p>		<p>with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>Section 4.12.1 of the EIS evaluates water supply needs for the KBMP. Estimated average water demand is approximately 95,879 gallons per day, based on projected potable and irrigation use.</p> <p>Kamehameha Schools holds an existing allocation of 240 water credits for the Project Area through an agreement with the County of Hawai'i Water Board. The County of Hawai'i DWS has confirmed that Kamehameha Schools' water credits are sufficient to support the Project. The credits being utilized for the Project are existing allocated and entitled credits not dependent on new water source development.</p> <p>According to the 2017 Hawai'i Water Use and Development Plan Update, projected demand, including authorized planned uses such as the KBMP, remains below the sustainable yield threshold for the Keauhou Aquifer System, indicating that water withdrawals associated with the Project are not expected to result in adverse cumulative impacts.</p> <p>Water conservation measures will be incorporated into Project design and may include efficient irrigation systems such as drip irrigation and moisture sensors, use of non-potable water for irrigation, drought-tolerant landscaping, and ultra-low flow fixtures and toilets.</p> <p>Coordination with the County DWS will continue through the design phase, with final construction plans to be reviewed and approved by DWS and the Hawai'i Fire Department.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Please review the many environmental letters filed with the county complaining that the “studies” Kamehameha Schools rely on are far short of what is demanded under State and Federal law.</p>	<p>Ben Rice</p>	<p>The EIS was conducted pursuant to State of Hawai‘i’s requirements for environmental review and has been prepared in accordance with Hawai‘i’s Environmental Policy Act (HEPA), as established under Hawai‘i Revised Statutes (HRS) Chapter 343 and Hawai‘i Administrative Rules (HAR) Chapter 11-200.1.</p> <p>Chapter 4 the EIS describes the existing environmental conditions and discusses potential impacts of the Proposed Action. Strategies to minimize impacts and to mitigate any significant impacts are identified.</p> <p>The studies referenced in the EIS were conducted by qualified professionals in consultation with relevant agencies.</p>
<p>We take issue with the conclusion that the project developer felt they met the standard stated in the early pages of the document: "HRS Section 343-5(e), enacted by Act 172 (2012), allows an applicant to prepare an EIS rather than an environmental assessment if the approving agency determines, through its judgment and experience, that an EIS is the acceptable level of environmental review." Kamehameha Schools stewards approximately 54 acres at Keauhou Bay, a relatively small area that is utilized in a variety of ways by tourists and residents alike. Historically, the significant demand and utilization of this area can and often creates congestion which leads to user conflicts along the bayfront. This unique and culturally significant area demands more time and consideration of factors than just more increase of profitability of the Kamehameha Schools investment of over \$100 million dollars. We encourage you to complete a proper and full environmental assessment of this project. This area is too historical, too valuable, and too cultural to give the developer this easy pass with an EIS. Do the full environmental assessment of this project.</p>	<p>Bill and Cindy Armer</p>	<p>In consultation with relevant agencies and based on the scope and complexity of the proposed project, the determination was made that an EIS was warranted for this project due to its potential environmental, cultural, and social implications.</p> <p>It is important to note that an EIS is considered a more detailed and comprehensive document compared to an EA, as it analyzes the potential environmental, cultural, and socio-economic impacts of a proposed action and its alternatives. It identifies mitigation measures and provides decision-makers and the public with a deeper understanding of the project's effects. The EIS process also includes broader consultation requirements, longer public review periods, and more rigorous documentation compared to an EA.</p>
<p>Where is the certified shoreline survey, a prerequisite to applying for a SMA permit and shoreline setback variance? Why is it not included in this DEIS?</p>	<p>Claudia Rohr</p>	<p>Please refer to EIS Section 1.9 for a discussion of required government permits and approvals.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Will you be seeking to purchase easements through the OCCL and BLNR for those structures encroaching onto state land in the conservation district, and when?</p> <p>Please describe everything to be covered in the shoreline setback variance?</p> <p>Please list, locate, and describe all of KS's proposed cultural and educational uses, activities, and programs for its students and charter school Hamana for the project area that must be included in any assessment application? Please show where these uses and activities are permit as a matter of right in the zoning code. Or do you intend to apply for a use permit concurrent with the SMA permit?</p> <p>Please list, locate, and describe all of KS's contemplated cultural and educational uses, activities, and programs for the He'eia Bay property that will require an assessment application? Please show where these uses and activities are permit as a matter of right in the zoning code. Or do you intend to apply for a use permit concurrent with the SMA permit?</p> <p>Please explain and justify why the He'eia Bay property management plan is not potentially illegally segmented from this DEIS?</p> <p>Please discuss fire roads and availability of fire service.</p> <p>What are the grubbing permit numbers for the grubbing of the historic trails for the survey work?</p> <p>Does KS intend to develop a separate wildlife conservation management plan? Why not?</p> <p>Why do you need section 404 and 10 permits from the Army Corps of engineers?</p> <p>Are there any open ACE permits. Provide permit numbers, please.</p>		<p>The development sequence follows a structured process. Initially, the EIS process will be completed, followed by the SMA permit application, and finally obtainment of other required permits and approvals. As such, specific permit numbers cannot be provided at this stage, as they will be determined upon completion of the aforementioned steps.</p> <p>A shoreline survey will be completed as required as part of the SMA process. The shoreline setback variance is a separate and distinct process from the EIS. Proposed improvements that fall within the shoreline setback area as delineated by the certified shoreline survey will be included in the shoreline setback variance.</p> <p>The EIS evaluates all work covered for KBMP regardless of whether it is determined to be within a shoreline survey area or not. The Project does not include actions on State-owned land or in the Conservation District.</p> <p>Section 5.3.3 of the EIS discussed County of Hawai'i zoning. The Project will adherence to all requirements of the zoning code. The majority of the Project Area is currently zoned in the Resort-Hotel district. A Use Permit will be obtained for the proposed educational and cultural uses if required by the County.</p> <p>Future educational partners will be selected after all entitlements have been obtained for the Project. All future tenants and operators within the Project Area will be vetted by Kamehameha Schools to align with the vision, management strategies, and values set forth in the KBMP. This includes commercial operators, retail tenants, ocean recreation service providers, and cultural education partners.</p> <p>He'eia Bay is not located within the Project Area, nor are the two area's physically connected in any way. As such, no programs or improvements for He'eia Bay are proposed as part of the current Project.</p> <p>Section 4.9.2 of the EIS discusses fire protection, emergency medical services, and hospital services. Fire trucks will access the site either via Kamehameha III Road or Kaleiopapa Street. The</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>construction of Old Kona Road, linking Kamehameha III Road and Kaleiopapa Street, provides a crucial alternative evacuation route, significantly enhancing emergency responsiveness and accessibility during fire events.</p> <p>Removal of invasive Guinea grass and koa haole trees was required to conduct the archaeological survey of historic trails on the site. A grubbing permit was not needed as the clearing activity involved less than one-acre.</p> <p>A separate wildlife conservation management plan is not proposed as it is not required to satisfy the Purpose and Need set forth in EIS Section 2.7. The KBMP is a comprehensive management plan which includes wildfire considerations. Implementation of the KBMP will provide active stewardship of the Project Area and reduce the likelihood of wildfire occurrence.</p> <p>Section 404 and 10 permits from the Army Corps of engineers may be required as part of planned restoration of Ho'okūkū pond. Further consultation with the Army Corps will verify what specific permits and approvals are required.</p>
<p>KCC is concerned, however, that the DEIS does not adequately address four significant issues, some of which could undercut or nullify the other benefits of the KBMP. The first relates to storm water runoff, which the DEIS concludes is not an issue because it has not been reported to the County or DOT. (See, DEIS 4.5 at 4-81.) The second relates to infrastructure, specifically the relocation of the existing near shore water and sewer infrastructure and associated electrical and telecom munications lines. Ongoing and future climate change is likely to result in flooding and breaching of this infrastructure with catastrophic consequences to all the good that KS hopes to accomplish. The third significant issue not addressed in the DEIS is the safety and ongoing traditional use of Keauhou Bay by the lāhui and other local residents due to the unregulated increase of motorized vessels using Keauhou Bay. The fourth is how the plan might affect KCC's practical operations and the potential for KCC</p>	<p>Carolyn Leilani Carter</p>	<p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Kamehameha Schools does not own the buried utility systems along the bayfront and therefore cannot initiate relocation. However, Kamehameha Schools acknowledges the potential impacts of sea level rise on this infrastructure and will collaborate with the County and utilities to explore proactive solutions that enhance long-term system resilience. Kamehameha Schools remains open to cooperating with utility providers should they</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>playing a supporting role in the implementation of the KBMP.</p>		<p>decide to relocate infrastructure in the future as part of their mitigation strategies.</p> <p>In Hawaii, these responsibilities are managed by the Department of Land and Natural Resources (DLNR), through its Division of Boating and Ocean Recreation and Division of Conservation and Resources Enforcement. While Kamehameha Schools does not have jurisdiction over the enforcement of ocean safety regulations, it may contribute to ocean safety and minimizing conflicts between boaters and swimmers through educational initiatives and strategically placed signage.</p> <p>Implementation of the KBMP is not anticipated to adversely impact KCC operations. The Project seeks to encourage the perpetuation of Hawaiian outrigger canoe paddling practices at Keauhou Bay.</p>
<p>The DEIS states, "The EIS will consider four alternatives to the Proposed Action: 1. No-Action Alternative 2. Higher Density Development Alternative (also known as Highest and Best Use (HBU)) 3. Housing Alternative 4. Conveyance Alternative" None of these four alternatives are appropriate, given the history of and existing conditions on and around this wahi pana. The most appropriate proposed action would be one which perpetuates ho'oponopono between the past, the present, and the future.</p> <p>Such a proposed action would: 1) remove tourism-related development strategies, 2) remove economics as a primary evaluation criteria, and 3) change the paradigm of this wahi pana being a commercial property to a center for cultural restoration and perpetuation.</p>	<p>Sierra Club (Moku Loa Hawaii Island)</p>	<p>The current operational model at Keauhou Bay is financially unsustainable. Kamehameha Schools is not generating sufficient income from existing tenants to cover the costs associated with managing and maintaining the area. As a result, funds must be redirected from the institution's broader endowment to subsidize stewardship activities at Keauhou Bay. Reliable revenue generation is critical to support the ongoing management of community spaces, maintain safe access, protect natural resources, restore ecosystems, perform regular groundskeeping, conduct routine repairs and maintenance, and implement necessary improvements to facilities and infrastructure. Additionally, funding is essential to preserve significant cultural sites and expand cultural and educational programming envisioned under the KBMP.</p> <p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The location of the KBMP is ideal for the proposed low-impact lodging due to its existing land use designations and surrounding amenities. The Project Area is designated as Urban under the State Land Use District Map (Figure 1-4), which supports resort, retail, and mixed-use developments. The proposed low-impact lodging aligns with this established urban framework and supports the area's planned growth objectives. Additionally, the specific portion of the Project Area designated for lodging is zoned V-75: Resort-Hotel District under the County of Hawai'i Zoning Code (Figure 1-6), making resort use a compatible and appropriate land use. The surrounding context, including the Outrigger Kona Resort and Spa, residential condominiums, the Kona Country Club golf course, the Keauhou Shopping Center, vacation rentals, and ocean recreation and tour operators, further reinforces the suitability of the site for a low-impact lodging that complements and supports existing community and visitor-serving uses.</p> <p>The proposed lodging is intentionally designed as low-impact, with a low-profile and low-density layout that is well below the maximum development intensity allowed under current County of Hawai'i zoning. Rather than maximizing building heights, unit counts, or commercial intensity permitted in the V-.75 Resort-Hotel District, the design emphasizes small-scale bungalow-style lodging that integrates with the surrounding cultural landscape.</p> <p>The criteria selected to evaluate the alternatives is based on the Purpose and Need set forth in EIS Section 2.7.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
There is no Table of Contents for Volume II.. Users must “seek-and-find” the Appendix.	Sierra Club (Moku Loa Hawaii Island)	A table of contents for the Appendices is provided in the FEIS. The PDF document includes searchable text and bookmarks for navigation.
Appendix A, EISPN Scoping Meeting Minutes, 4/12/22: Summary does not include whether or participant was cultural/lineal descendant. Does not include comments opposing resort hotel for cultural/historic reasons.	Sierra Club (Moku Loa Hawaii Island)	Identification of individual community members as lineal descendants is not a requirement of the EISPN scoping process under HAR Section 11-200.1-24(s)(4). EIS Section 7.1 discusses the concerns raised by attendees at the scoping meeting including those who opposed the Project for cultural and historic reasons. Please refer to Appendix A for a list of all those that attended.  Item number seven (7) in particular addresses concerns related to commercial and resort activities at Keauhou Bay.
Appendix B= EISPN Comment Letters: No summary listing of comment letters No page numbers. No determination of whether commenters are cultural/lineal descendant.	Sierra Club (Moku Loa Hawaii Island)	Identification of individual commenters as lineal descendants is not a requirement of HAR Section 11-200.1-24(s)(2). A summary of comments received is provided in EIS Section 7. Page numbers will be added to Volume II of the Final EIS.
KS Mission & Purpose and Need		
Kamehameha Schools is using this project development strictly to make profits for themselves on the back of the environment and long time residents of this island. The plan is short-sighted as it will be detrimental in the long run to our island habitat and the people that live here, and have lived here for years and generations.	Nancy Vidana	The KBMP is rooted in the principle of mālama ‘āina, reflecting Kamehameha Schools’ deep commitment to caring for the land through a cultural, environmental, and educational lens. The plan embraces a long-term stewardship approach that prioritizes the protection and revitalization of both natural and cultural resources within the project area. The KBMP focuses on low-impact design, carefully locating future uses to minimize disturbance, preserving sensitive habitats, and protecting culturally significant sites.  The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		Environmental stewardship is also expressed through restoration of native vegetation, landscape design, and preservation of natural water features such as springs and anchialine ponds, which support unique ecological systems. Long-term management of these resources is made possible through a sustainable tourism model that uses revenue from low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.
Mahalo for this opportunity to comment on the Keauhou Bay Management Plan Draft Environmental Impact Statement. Reading this Draft EIS is an exercise in cognitive dissonance. Critical objectives of the KS mission and intent for Keahou Bay are directly undermined by the planned development. Furthermore, it lacks creativity by perpetuating "same old" approaches for Hawai'i economic development and will further deteriorate the already fragile nature of Keauhou Bay and its marine health. The current plan does not meet stated KS and project objectives, and is worse than the "No Action Alternative." That said, the current plan does not meet stated KS and project objectives, and is worse than the "No Action Alternative."	Peter Matlock	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.</p> <p>The DEIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action. Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p>
The Plan states "The mission of Kamehameha Schools is to create educational opportunities in perpetuity to improve the capability and well-being of people of Hawaiian ancestry. Kamehameha Schools' Vision 2040 seeks to improve the well-being of 'āina (land) and the lāhui (Hawaiian people) within one generation." (pg. 2-2) This is an eminently laudable objective. With approximately 55% of Native Hawaiians now living outside of the Hawai'i Islands, improving Hawaiian well-being is more critical than ever. However, this Plan fails to address this concern, is itself risky (note history of prior hotels at Kahalu'u), and undermines	Peter Matlock	<p>Kamehameha Schools promotes the integration of culture and place-based education to foster kinship and kuleana between kānaka and 'āina. By bridging resource management and education, Kamehameha Schools campus and community students actively engage in Hawaiian culture and history, instilling a sense of pride in their heritage and connecting them to communities in meaningful ways. Keauhou Bay offers a unique opportunity to infuse culture and education in a historically significant location.</p> <p>The lands at Keauhou Bay are currently underutilized for educational programming and therefore insufficient for supporting</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>the intent to improve well-being by holding needed improvements to Keauhou cultural/historic sites hostage to development that will seriously degrade Keauhou Bay health and public access—with the end result of a net decline in well-being.</p>		<p>Kamehameha Schools’s core mission. There are no permanent facilities at Keauhou for hosting classrooms, workshops, or other cultural exhibits. The Project proposes to utilize the existing buildings at the bayfront for a new place-based educational and heritage center that will support its educational mission.</p> <p>The KBMP is rooted in the principle of mālama ‘āina, reflecting Kamehameha Schools’ deep commitment to caring for the land through a cultural, environmental, and educational lens. The plan embraces a long-term stewardship approach that prioritizes the protection and revitalization of both natural and cultural resources within the project area. The KBMP focuses on low-impact design, carefully locating future uses to minimize disturbance, preserving sensitive habitats, and protecting culturally significant sites.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts.</p> <p>Environmental stewardship is also expressed through restoration of native vegetation, landscape design, and preservation of natural water features such as springs and anchialine ponds, which support unique ecological systems. Long-term management of these resources is made possible through a sustainable tourism model that uses revenue from low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>
<p>5. The consistent underlying theme in this Plan is KS desire for profit. We are asked to accept as an article of faith that revenues from ONLY the Plan's 29.12 acres can be used to support desired renovations and support students in the future, whereas Princess Pauahi's estate currently comprises 363,800 acres and a portfolio valued at \$15.1 billion                      (<a href="https://investments.ksbe.edu/history#:~:text=Today%2C%20her%20estate%20has%20grown,as%20of%20June%203">https://investments.ksbe.edu/history#:~:text=Today%2C%20her%20estate%20has%20grown,as%20of%20June%203</a>)</p>	Peter Matlock	<p>The lands owned by Kamehameha Schools at Keauhou Bay are private lands, not public lands. Public access to these lands has historically been allowed voluntarily by Kamehameha Schools. However, providing this access has required Kamehameha Schools to absorb the full costs of maintenance, security, and operations typically associated with public parks, without the benefit of taxpayer funding or public subsidies.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>0%2C%202022.). This amount of building will cause serious environmental degradation to a bay critical to Hawaiian history and culture—does KS not have other locations to build its hotel? have other locations to build its hotel?</p>		<p>The current operational model at Keauhou Bay is financially unsustainable. Kamehameha Schools is not generating sufficient income from existing tenants to cover the costs associated with managing and maintaining the area. As a result, funds must be redirected from the institution's broader endowment to subsidize stewardship activities at Keauhou Bay. This is viewed as unacceptable by Kamehameha Schools.</p> <p>Reliable revenue generation is critical to support the ongoing management of community spaces, maintain safe access, protect natural resources, restore ecosystems, perform regular groundskeeping, conduct routine repairs and maintenance, and implement necessary improvements to facilities and infrastructure. Additionally, funding is essential to preserve significant cultural sites and expand cultural and educational programming envisioned under the KBMP.</p>
<p>7. When it is said the Plan will "Address the opportunity gap within Kona's existing visitor accommodation inventory" then it is clear that KS is thinking more as a real estate developer than as a steward of Hawaiian education and cultural preservation.</p>	<p>Peter Matlock</p>	<p>Kamehameha Schools is first and foremost an educational institution with a mission to improve the well-being of Native Hawaiians through educational opportunities. This mission is at the heart of everything Kamehameha Schools does, including how it stewards lands, manage resources, and engage with the communities it serves.</p> <p>The Project Area is designated as Urban under the State Land Use District Map (Figure 1-4), which supports resort, retail, and mixed-use developments. The proposed low-impact lodging aligns with this established urban framework and supports the area's planned growth objectives. Additionally, the specific portion of the Project Area designated for lodging is zoned V-.75: Resort-Hotel District under the County of Hawai'i Zoning Code (Figure 1-6), making resort use a compatible and appropriate land use. The surrounding context, including the Outrigger Kona Resort and Spa, residential condominiums, the Kona Country Club golf course, the Keauhou Shopping Center, vacation rentals, and ocean recreation and tour operators, further reinforces the suitability of the site for a low-impact lodging that complements and supports existing community and visitor-serving uses.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>The proposed lodging is intentionally designed as low-impact, with a low-profile and low-density layout that is well below the maximum development intensity allowed under current County of Hawai'i zoning. Rather than maximizing building heights, unit counts, or commercial intensity permitted in the V-.75 Resort-Hotel District, the design emphasizes small-scale bungalow-style lodging that integrates with the surrounding cultural landscape.</p> <p>In alignment with the values of Kamehameha Schools, the project prioritizes sustainability over profit and is seen as a key component in a broader sustainable tourism model.</p>
<p>I am writing to ask that you reconsider (and reject) the current management plan for Keauhou Bay. Although the plan may advance point #4 of your mission [“Optimize and invest in revenue opportunities that align to the betterment of our beneficiaries or the management of our assets and provide long-term economic returns”], I believe that it will permanently negatively impact points 1-3 of your mission and therefore the plan should be rejected. I do NOT believe that the current plan will:</p> <ul style="list-style-type: none"> <li>• Establish and expand place-based cultural stewardship activities to cultivate a strong Native Hawaiian identity.</li> <li>• Support engaging, high-quality, and meaningful educational experiences that include a strategic collaboration with other organizational partners</li> <li>• Support nurturing a positive and enduring relationship with community members within the Keauhou Bay region that share similar values and a commitment to education, ‘āina, and culture.</li> </ul> <p>I urge the Trustees to avoid the temptation of this “revenue opportunity.” I truly believe that if you trustees carefully examine your mission, you will agree that the best exercise of your fiduciary duty is to reject the proposed management plan. It is not consistent with Princess Pauahi Pākī’s vision. Although there are aspects of the proposed management plan that are very positive and promote the culture and</p>	<p>Laurel Terry</p>	<p>The KBMP identifies five integrated management strategies to guide Kamehameha Schools’ stewardship of Keauhou Bay. These strategies are designed to work in unison, forming a comprehensive and interconnected approach that balances cultural, educational, environmental, recreational, and economic objectives.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
protect the land, I fear that the overwhelming impact will be negative.		
<p>I, however, do not support the proposal by Kamehameha Schools (KS) at this location. It is hard to accept the proposal and its re-sculpting of the land, reorganization of uses, and “need” to create a retail center, and 172 (or 189 with @10% of the units as a suite mix if I am understanding this correctly) bungalows with the mission and values that are promoted by KS (see Chapter 2, Purpose and Need for the Proposed Action). Please support Option 1, the No-Action Alternative, as this is the only solution that feels appropriate of this area.</p> <p>I am not one to count other people’s money, but please tell me how an organization that has assets totaling approximately \$14 Billion dollars “needs” to re-invigorate an area it feels is “underperforming economically”. This is greed, pure and simple. I am not swayed by the \$125 Million dollars in costs to construct such a proposal. I do not see how the mission and values of KS align with the butchering of this special area.</p> <p>Chapter 6 discusses the Alternatives to the Proposed Action. I am familiar with this section of the DEIS, as this is a requirement in a draft Environmental Impact Report (DEIR) in California where I worked as a Planning Director or Manager. Option 4, Conveyance Alternative, reads like a gut punch. If you don’t like this proposal, KS could sell the land to a developer who would pursue its own highest and best use. Please do not threaten the community, KS. Continue to work with the people you claim you support.</p> <p>Please choose Option 1, the No-Action Alternative, for this proposal. KS has not made a compelling case to re-sculpt, reorganize, and financially supercharge the uses at this location. This organization continues the story of “Broken Trust” when it uses the phrase that this area of Keauhou Bay and its management plan “underperforms</p>	Elizabeth Dunn	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana. The EIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action. Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p> <p>Kamehameha Schools, as a private Native Hawaiian landowner, retains the right to use the lands endowed by Princess Bernice Pauahi Bishop in a manner that supports its mission and organizational needs. These lands may be utilized to the highest and best use as permitted under applicable regulations.</p> <p>The lands owned by Kamehameha Schools at Keauhou Bay are private lands, not public lands. Public access to these lands has historically been allowed voluntarily by Kamehameha Schools. However, providing this access has required Kamehameha Schools to absorb the full costs of maintenance, security, and operations typically associated with public parks, without the benefit of taxpayer funding or public subsidies.</p> <p>The current operational model at Keauhou Bay is financially unsustainable. Kamehameha Schools is not generating sufficient income from existing tenants to cover the costs associated with managing and maintaining the area. As a result, funds must be redirected from the institution’s broader endowment to subsidize stewardship activities at Keauhou Bay. Reliable revenue generation is critical to support the ongoing management of community spaces, maintain safe access, protect natural resources, restore ecosystems, perform regular groundskeeping, conduct routine repairs and maintenance, and implement necessary improvements to facilities and infrastructure. Additionally, funding is essential to preserve significant cultural sites and expand cultural and educational programming envisioned under the KBMP.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>economically”. It is Kamehameha Schools that underperforms morally and ethically</p>		<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan’s implementation can be self-sustaining. Long-term management of the bay’s natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The location of the KBMP is ideal for the proposed low-impact lodging due to its existing land use designations and surrounding amenities. The Project Area is designated as Urban under the State Land Use District Map (Figure 1-4), which supports resort, retail, and mixed-use developments. The proposed low-impact lodging aligns with this established urban framework and supports the area’s planned growth objectives. Additionally, the specific portion of the Project Area designated for lodging is zoned V-.75: Resort-Hotel District under the County of Hawai‘i Zoning Code (Figure 1-6), making resort use a compatible and appropriate land use. The surrounding context, including the Outrigger Kona Resort and Spa, residential condominiums, the Kona Country Club golf course, the Keauhou Shopping Center, vacation rentals, and ocean recreation and tour operators, further reinforces the suitability of the site for a low-impact lodging that complements and supports existing community and visitor-serving uses.</p> <p>The proposed lodging is intentionally designed as low-impact, with a low-profile and low-density layout that is well below the maximum development intensity allowed under current County of Hawai‘i zoning. Rather than maximizing building heights, unit counts, or</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>commercial intensity permitted in the V-.75 Resort-Hotel District, the design emphasizes small-scale bungalow-style lodging that integrates with the surrounding cultural landscape.</p> <p>Alternatives to the proposed action are discussed in Chapter 6 of the EIS. As stated in Section 6.4, the disposition of Kamehameha Schools' resort-zoned land at Keauhou Bay under the Conveyance Alternative would be contrary to its goal of holding legacy lands in perpetuity for the purpose of Ke Ali'i Pauahi's mission. Although this alternative would result in short-term revenue generation for Kamehameha Schools, it would result in greater environmental impact, and Kamehameha Schools would relinquish its ability to guide development to ensure the long-term care for the bays natural and cultural resources. For these reasons, this alternative was dismissed from further consideration.</p>
<p>Section 4.17, Unresolved Issues, identifies Potential unresolved issues associated with the Proposed Project, which include:</p> <ul style="list-style-type: none"> <li>• Identifying long-term programming of cultural heritage area</li> <li>• Identification of a developer and operator for the low-impact lodging</li> <li>• Agreement with the County to coordinate treatment of walkways over County rights-of way</li> <li>• Coordination with County/Potential Licensee for the removal and possible relocation of the volleyball court</li> <li>• Potential partnership with DOBOR to manage boat trailer parking areas</li> </ul> <p>I believe that all of these issues can be worked through, without having to economically supercharge this area of Keauhou Bay. Identifying a developer and operator of a luxury boutique/curated resort vacation experience is a phantom issue and one that is created by KS because of this proposal.</p>	Elizabeth Dunn	<p>The "Unresolved Issues" section of the EIS identifies outstanding matters that require further coordination, consultation, or negotiation before full implementation of the proposed action. Section 4.17 outlines potential unresolved issues associated with the project.</p> <p>These issues have been identified as unresolved at the time of EIS publication. They largely involve future programmatic decisions that will be addressed following construction and are pending due to the need to identify future tenants, licensees, and educational partners. Many of these matters will be resolved through ongoing negotiations during the issuance of licenses and leases.</p> <p>Specific issues such as the ili'ili surfacing treatment over County-owned crosswalks will be addressed during the County's review of land use approvals and the design review process for construction plans.</p> <p>Consultation with the County and DOBOR is expected to continue through project implementation to coordinate responsibilities for boat trailer parking.</p> <p>The inclusion of this section allows agencies and the public to understand the remaining procedural steps while recognizing that</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		these unresolved issues do not present significant barriers to proceeding with the Proposed Action. Rather, they represent future operational considerations that will be managed as part of Project implementation.
Surely the four other key concerns in Section 2.6 Key Issues and Concerns - 1) the integrity of natural and cultural resources is threatened in the absence of a long term comprehensive management plan; 2) incompatible uses at the bayfront create conflicts between users and disrespect for wahi pana; 3) Kamehameha Schools lands at Keauhou Bay are underutilized for educational programming; and 4) existing circulation patterns create congestion and safety concerns - can be accommodated and completed without the “need” to establish nearly 190 luxury hotel rooms.	Elizabeth Dunn	<p>The KBMP identifies five integrated management strategies to guide Kamehameha Schools’ stewardship of Keauhou Bay. These strategies are designed to work in unison, forming a comprehensive and interconnected approach that balances cultural, educational, environmental, recreational, and economic objectives.</p> <p>The KBMP is designed to improve conditions at the bay by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p>
Kamehameha Schools is rightly famous for its faithful stewardship of the historical sites at Kahalu’u Manowai and elsewhere. Their proposal to develop the open lands above Keauhou Bay seems contradictory to the philosophy represented by that stewardship.	Michael Hanly	The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan’s implementation can be self-sustaining. Long-term management of the bay’s natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<b>Land Management</b>		
<p>Before you destroy Keauhou Bay and strip the community of another beach access, I suggest you complete the work at the former Keauhou Beach Hotel, which is essentially inaccessible to the community. It saddens me the Kamehameha Schools is willing to continue decimating community access to resources.</p>	Marta Derieg	<p>The KBMP will improve shoreline access by establishing new pedestrian pathways that connect parking areas to the bayfront and by expanding Ka'ili'ilinehe Beach Park through the creation of a mauka-makai open space corridor. Relocation of commercial activities away from the shoreline will open the bayfront for cultural, recreational, and community use, enhancing access and connectivity. Refer to EIS Section 3.2 for a description of the proposed action.</p>
<p>Keauhou Bay represents not only a revered community gathering place, but more importantly a living artifact of Native Hawaiian history. As birthplace of Kauikeaouli, would later become Kamehameha III and Mō'i o Ke Aupuni 'o Hawai'i in 1814, Keauhou, in the ahupua'a of Kahalu'u, holds some of our most culturally significant ancient sites and historic event locations that forever changed Hawai'i's history.</p> <p>With the high-use of Keauhou Bay by residents, visitors, and community groups in present times, I see much value in devising comprehensive management plan that aims to address the challenges that have resulted from these multiple uses that sometimes conflict with one another in a relatively confine geographic space. To this regard, I appreciate KS' reorientation of commercial activities away from culturally sensitive areas, as well as their intent to establish a place-based cultural education center.</p> <p>Furthermore, I trust that KS will continue to engage the community throughout the entire process, especially concerning the proposed lodging in the resort-zoned plateau mauka of Keauhou Bay. Ensuring ongoing dialogue and collaboration will be crucial to balancing development with the preservation of cultural and historical integrity, benefiting both current and future generations.</p>	Dru Mamo Kanuha	<p>The KBMP is designed to reorganize the uses and activities within the bay to better reflect the cultural significance of the area and to support a more harmonious relationship between users, place, and purpose. Central to this reorganization is the concept of directing new growth to appropriate areas while preserving culturally sensitive areas near the shoreline. To resolve long-standing conflicts between incompatible uses, the KBMP proposes relocating certain commercial operations, particularly those that are currently situated near sensitive cultural sites, to more suitable areas above the 'Ahu'ula cliff and along Kaleiopapa Street. By moving these uses away from the bayfront and heritage zones, the plan protects sacred spaces and allows for cultural practices to thrive without interference.</p> <p>Kamehameha Schools</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>The EIS Fails To Take In To Consideration The Historical Failure Of Proponent To Maintain Existing Facilities. The EIS fails to analyze the long history of the failure of the Project proponent to provide maintenance to the existing properties. The EIS vaguely references the long-term maintenance issues related to Project proponent's properties and then suggests that the maintenance failure is due to the lack of income from the properties and that in the future the maintenance will improve. Such a suggestion by Project proponent is misleading at best and verges on being an outright fraudulent misrepresentation. Project proponent is a \$14.6 billion dollar entity according to its website. Thus, the suggestion that the lack of maintenance was due to the lack of funds is outright untrue as the Project proponent for all intents and purposes has an unlimited amount of funding available in which to conduct maintenance. Moreover, Project proponent has historically received funding from the Keauhou properties through the boat yard rental, parking, canoe club and building rentals such that the failure to conduct maintenance is inexcusable. For example, the existing seawall owned by Project proponent has been in serious disrepair for over a decade, with the wall having large pieces falling off into the ocean and no repairs have been made. Similarly, after Project proponent's construction of the apparently unpermitted northern parking lots occurred and the sand volleyball court built on public lands was washed away, Project proponent failed to attempt to any repair. Project proponent failed to maintain existing drainage structures to the north of the existing volleyball court. Moreover, the cultural heritage corridor (which they supposedly they care about) has been allowed to fail into disrepair, with broken benches for sitting, peeling paint, overgrown plants and trash that have largely gone unrepaired and neglected for the last decade or more. (Personal observation.) Thus, there is ZERO evidence to support that if the Project is approved that the Project proponent will suddenly and magically start to actually do</p>	<p>Jeff Caufield</p>	<p>The lands owned by Kamehameha Schools at Keauhou Bay are private lands, not public lands. Public access to these lands has historically been allowed voluntarily by Kamehameha Schools. However, providing this access has required Kamehameha Schools to absorb the full costs of maintenance, security, and operations typically associated with public parks, without the benefit of taxpayer funding or public subsidies.</p> <p>The current operational model at Keauhou Bay is financially unsustainable. Kamehameha Schools is not generating sufficient income from existing tenants to cover the costs associated with managing and maintaining the area. As a result, funds must be redirected from the institution's broader endowment to subsidize stewardship activities at Keauhou Bay. Reliable revenue generation is critical to support the ongoing management of community spaces, maintain safe access, protect natural resources, restore ecosystems, perform regular groundskeeping, conduct routine repairs and maintenance, and implement necessary improvements to facilities and infrastructure. Additionally, funding is essential to preserve significant cultural sites and expand cultural and educational programming envisioned under the KBMP.</p> <p>The KBMP is designed to improve conditions at the bay by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the Project Area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage. Implementation of the Project will also allow Kamehameha Schools to make necessary upgrades and repairs to its facilities such as the pedestrian pathways, landscaping, waste receptacles, and landscaping you mentioned.</p> <p>Regarding the issue of the volleyball court, Kamehameha Schools does not have an agreement with any entity regarding the use of</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>maintenance on its' properties. As a result, the EIS MUST consider that the Project proponent will act EXACTLY as it has in the past and continue to fail to maintain its' properties and what the implications will be on the future for the Project based on the last many decades of neglect by the Project proponent. Moreover, the EIS fails to disclose and discuss the long history of scandal and abuse associated with Project proponents organization and what transparency will exist to ensure that the Project will do what it is supposed to do. The EIS mentions nothing of other "projects" such as the cultural center and botanical gardens along Alii Drive that Project proponent has abandoned and failed to maintain in the past and currently. There is NOTHING in the EIS that provides any checks and balances to ensure that the Project will actually be maintained and based on history on the Project properties and nearby failed projects by the Project proponent, it is unlikely that the Project will meet its' promises. Moreover, the EIS, based on the poor maintenance history by the Project proponent on these and other nearby properties needs to consider the impacts of the Project proponent continuing to conduct basic maintenance on the Project properties as it has done for decades. In other words, the EIS needs to address not only the lack of historical maintenance, other failed nearby projects, and the impact of the failure to maintain the Project in the future. (Typically, a Project such as this will have a detailed maintenance and upkeep schedule of the Project and mitigation measures that then can be adopted as conditions of the Project approval and be enforceable by regulatory agencies.)</p>		<p>the existing or former volleyball court. The volleyball courts represent an informal and unapproved use of Kamehameha Schools' property. While residents have enjoyed the privilege of utilizing the courts in the past, Kamehameha Schools has no obligation to maintain, reconstruct, or provide improved facilities for this purpose. Future use and management of the area will be aligned with the goals and strategies outlined in the KBMP.</p> <p>The KBMP includes improvements to expand and formalize existing boat trailer and public parking areas north of the bay. These upgrades will include paving, stall delineation, lighting, and drainage designed to improve both capacity and safety.</p> <p>The existing boat trailer parking area was originally constructed in the 1960s, prior to the establishment of the current zoning and permitting frameworks. As such, it is considered a nonconforming use. The SMA permit requirement was established in 1975 with the enactment of Act 176, also known as the Shoreline Protection Act, which created a regulatory process for development within coastal areas.</p> <p>In 2022, Sea Quest Hawai'i, a tenant of Kamehameha Schools, applied for and received SMA Minor permit related to ongoing boat trailer storage operations. The permit was approved on November 16, 2022 (Keauhou Marine Boat Park; TMK (3) 7-6-010:044; County SMA permit: PL-SAA-2022-000101 and PL-SMM-2022-000031). The approved scope included the installation of a new entry gate, security cameras, fencing, signage, and lighting, as well as maintenance of the existing parking lots and removal of overgrown vegetation and one tree located within the parking area.</p> <p>As part of the KBMP, Kamehameha Schools intends to pursue a comprehensive SMA permit to formalize and entitle both existing and proposed uses within the Project Area. This approach will address legacy uses that predate the permitting requirements and provide a regulatory pathway for new improvements consistent with the KBMP.</p> <p>It is important to note that Kamehameha Schools does not own or maintain Kamehameha III Road. The roadway is under the</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>jurisdiction of the County of Hawai'i, which is responsible for its upkeep, including any upgrades or modifications to pavement, drainage systems, or related infrastructure. Kamehameha Schools does not have the authority to implement improvements within the public right-of-way or make changes to stormwater systems located within these County-owned corridors. However, implementation of the Project will not increase stormwater runoff onto the road. The existing Project Area is unmanaged and lacks stormwater infrastructure, leading to uncontrolled runoff that may flow toward Kamehameha III Road, occasionally pooling in the cul-de-sac and contributing to overflow toward the ocean. With Project implementation, on-site drainage improvements and best management practices will be incorporated to capture, retain, and treat stormwater within the Project Area, thereby reducing uncontrolled flow onto Kamehameha III Road.</p> <p>EIS Section 4.5 discusses Project stormwater management and drainage improvements. The project's detailed drainage analysis and design will require design review and approval by the County for land use and construction plan approvals subsequent to the FEIS. The Project will be designed to comply with the County Drainage Standards, which include design requirements and regulations to address stormwater impacts within the County of Hawai'i.</p> <p>The Project will comply with all NPDES permit requirements and follow established practices to prevent sediment and pollutants from reaching nearby water bodies during construction.</p> <p>The KBMP does not propose any alterations to the existing seawall along the Keauhou Bay shoreline. There are no planned uses or developments in the immediate vicinity that would require alterations to the seawall or affect its current function.</p> <p>The comment regarding other projects, including the "cultural center and botanical gardens along Ali'i Drive", is noted. The site referenced is the Kahalu'u Ma Kai property, which is a separate area distinct from the KBMP. Kamehameha Schools has a proven track record of long-term land stewardship throughout Hawai'i,</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>including significant cultural and environmental restoration efforts at Kahalu'u Ma Kai and elsewhere.</p> <p>In 2018, Kamehameha Schools completed the removal of the Keauhou Beach resort as well as previously removing the Kona Lagoon resort in 2004 at the Kahalu'u Ma Kai site. Kamehameha Schools has put significant effort into restoring multiple heiau on site while evolving the 'āina into a place of cultural learning, indigenous education, and native stewardship. Future restoration of an additional heiau is also being planned, and Kahalu'u ma Kai is presently hosting educational and cultural programming and events.</p>
<p>I am in support of the heritage corridors, open space, redevelopment of community and public spaces and access, additional parking, and mālama &amp; conservation of wahi pana at Keauhou. These efforts are what I consider the kuleana of the landowner, and should have been implemented as a part of appropriate land management and stewardship. The sooner the better on these points.</p>	Lillie Makaila	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>
<p>You have not been good stewards of your land in the area. Hoping you can start to change that now. No reason to wait for redevelopment. You can remove junk vehicles, pick up trash, and do something when people decide to camp and car camp. You have multiple people camping on your properties now. That adds trash and will likely lead to brush fires at some point. I have reached out multiple times to your asset manager for the area. She has been mostly</p>	Peter McCormick	<p>The KBMP is designed to improve conditions at the bay by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the Project Area are designed to support and sustain cultural and environmental preservation efforts. Implementation of the Project will also allow Kamehameha Schools to make necessary upgrades and repairs to its facilities and alleviate issues of illegal camping and litter.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>responsive, but it is an ongoing problem that requires more than a reactionary approach to one of the few full-time residents in the area.</p> <p>Your lots in the area on Ehukai St, Kaleiopapa St, and Kamehameha III Rd are not zoned to be storage yards or boat yards but that is how they are being used now. Your tenants illegally store derelict cars, trailers, boats, and heavy equipment and make boat repairs. All of this looks terrible and leads to environmental damage to the land and the bay. Please clean this up immediately and factor this in for future plans.</p>		<p>The KBMP includes improvements to expand and formalize existing boat trailer and parking areas north of the bay. Kamehameha Schools’ intention is to continue the existing use as storage and long-term vessel parking. These upgrades will include paving, stall delineation, lighting and drainage, designed to improve both capacity and safety. Kamehameha Schools will obtain all necessary permits and approvals prior to construction.</p> <p>The area mentioned at the intersection of ‘Ehukai Street, Kaleiopapa Street will be improved for the proposed retail center. Please refer to EIS Section 3.2 for a description of the Proposed Action.</p>
<p>Proponents Failure to Maintain Existing Facilities the DEIS does not analyze the long history of the Project proponent’s failure to maintain existing properties. The DEIS suggests that the long-term maintenance issues related to the Project proponent’s properties are due to lack of income from the properties and that in the future, maintenance will improve. According to the Project proponent’s website their endowment is valued at \$14.6 billion suggesting lack of funds should not be an issue contributing to lack of maintenance. Additionally, the Project proponent has historically received funds from the Keauhou properties through the boat yard rental, parking, canoe club, and building rentals. There is little evidence to support that if the Project is approved, the Project proponent would conduct the required maintenance. An example is the existing seawall owned by the Project proponent, which has been in serious disrepair for over a decade with pieces falling into the ocean and no repairs made. As a result, the DEIS should consider the very likely scenario that the Project proponent may continue to act as it has historically and fail to maintain its properties</p>	Jennie Shield	<p>The lands owned by Kamehameha Schools at Keauhou Bay are private lands, not public lands. Public access to these lands has historically been allowed voluntarily by Kamehameha Schools. However, providing this access has required Kamehameha Schools to absorb the full costs of maintenance, security, and operations typically associated with public parks, without the benefit of taxpayer funding or public subsidies.</p> <p>The current operational model at Keauhou Bay is financially unsustainable. Kamehameha Schools is not generating sufficient income from existing tenants to cover the costs associated with managing and maintaining the area. As a result, funds must be redirected from the institution’s broader endowment to subsidize stewardship activities at Keauhou Bay. Reliable revenue generation is critical to support the ongoing management of community spaces, maintain safe access, protect natural resources, restore ecosystems, perform regular groundskeeping, conduct routine repairs and maintenance, and implement necessary improvements to facilities and infrastructure. Additionally, funding is essential to preserve significant cultural sites and expand cultural and educational programming envisioned under the KBMP.</p> <p>The KBMP is designed to improve conditions at the bay by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		Project Area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage. Implementation of the Project will also allow Kamehameha Schools to make necessary upgrades and repairs to its facilities and infrastructure.
<p>History of Failed Stewardship: KS has demonstrated a troubling lack of stewardship with the land already under its care in Keauhou, evident from ongoing issues such as broken toilets, persistent water wastage, use of chemical poisons near the coastline for weeds, and totally inadequate management of homelessness and drug-related problems. Given this poor track record of stewardship, we have skepticism about KS's ability and care to effectively manage new developments while never addressing basic existing challenges.</p> <p>Previous Failures in Retail and Dining: There is a historical precedent of failed retail and dining ventures in Keauhou which suggests that similar developments most likely will not achieve the anticipated success</p>	Bryce Groark	<p>The KBMP is designed to improve conditions at the bay by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the Project Area are designed to support and sustain cultural and environmental preservation efforts. Implementation of the Project will also allow Kamehameha Schools to make necessary upgrades and repairs to its facilities and alleviate issues of illegal camping and litter.</p> <p>The Project will comply with all applicable federal, state and County regulations related to the use of herbicides or pesticides that may be used for landscaping or managing invasive vegetation.</p> <p>It is certainly true that the long-term success of any economic endeavor is never a certainty. Extensive community engagement has taken place to develop the conceptual framework for the Proposed Action. Additional information has been added to Appendix P of the Final EIS on the anticipated economic benefits associated with visitor spending associated with guests of the proposed low impact lodging.</p>
<p>I walk down to and through the Bay by the Canoe Club every day. I believe that it needs serious clean-up, restructuring of the parking, congestion and some enhancements. I do NOT believe more housing is needed in this area... that will simply add to the congestion, pollution and disruption to this lovely area. It's wonderful to have a place that does NOT feel like a resort. It does however need care. Perhaps Kamehameha</p>	Johanne Parker	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
Schools should focus on caring for what it already has, instead of creating what we don't need. Thank you.		<p>hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The Project does not involve the development of new residential housing units. The additional jobs and incomes associated with the Project would contribute to residents' ability to pay for housing needs. A housing alternative is considered in the EIS however, housing uses would require more parking and infrastructure demands than low-impact lodging uses and would thereby result in increased traffic-related impacts and potentially utility demands. Due to the location and topography, the construction of housing units would be comparatively much more expensive to build, limiting their affordability for local residents in the region. Table 6-1 of the EIS provides a detailed evaluation of the Housing Alternative.</p>
Another development in this special area will only serve to enrich developers and Kamehameha Schools' pocketbooks...there is nothing in this proposal that benefits those of us who live here. I walk and use the bay every day and what strikes me as odd is the lack of care and respect for the area by the owner...Kamehameha Schools. Do something about the parking lot, the toxic trash can in the boat parking area, but don't give us more STVR/vacation rentals - ENOUGH VACATION RENTALS. Use your \$14 Billion in assets for educating the locals and give them a chance at a better life - not one working in hospitality you want to build! Keep Keauhou Bay old-school.	Stuart Parker	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Sadly, we are faced with a choice today, we have the power to consume everything and we have for centuries-but for the 1st time in our history we are faced with the repercussions of that behavior. We have so little left to replenish and we need to ensure sustainability for future generations. I am here to ask for more, encouraging KS to over see the stewardship of proper management reform. I am asking KS to get ahead of the imprint of construction and development to off set, guard against {Kahu} and prepare ahead for hazards to replenish unknown damages and lead as an example. KS has exceptional leadership and resources with the ability to pool resources with the state, federal government and scientists for ocean policies. I'm here to ask for more.</p>	<p>Jan Brinkman</p>	<p>The KBMP is rooted in the principle of mālama ‘āina, reflecting Kamehameha Schools’ deep commitment to caring for the land through a cultural, environmental, and educational lens. The plan embraces a long-term stewardship approach that prioritizes the protection and revitalization of both natural and cultural resources within the project area. The KBMP focuses on low-impact design, carefully locating future uses to minimize disturbance, preserving sensitive habitats, and protecting culturally significant sites.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p> <p>Environmental stewardship is also expressed through restoration of native vegetation, landscape design, and preservation of natural water features such as springs and anchialine ponds, which support unique ecological systems. Long-term management of these resources is made possible through a sustainable tourism model that uses revenue from low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>
<p>The lodging capacity at the former Sheraton Hotel, now the Outrigger, is far from fully utilized. I question the KS assumption that an adequate Return on Investment can be generated from the development of 150 boutique short-term rental units as proposed.</p>	<p>Tom Fetter</p>	<p>Extensive community engagement has taken place to develop the conceptual framework for the Proposed. Additional information has been added to Appendix P of the Final EIS on the anticipated economic benefits associated with visitor spending associated with guests of the proposed low impact lodging.</p>
<p>And...in addition to everything else, putting in new commercial space when there are so many vacant spaces around town seems wasteful. Please note the number of empty stores in the Keauhou Shopping Center, which is less than one mile away and which the Kamehameha Schols also</p>	<p>Laurel Terry</p>	<p>The Project will provide additional space to accommodate existing businesses relocating from the bay front area, therefore some of the additional retail space would have some built-in tenancy. Also, increased visitation to Keauhou Bay is anticipated due to improved amenities and the new low-impact lodging. The increased visitor</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
owns and manages. Similar to the conversion of the leasehold interest condos to fee simple condos, once this change is made, it cannot be undone.		spending in the area, associated with visitors to the new low impact lodging, would improve retail spending in the area and could potentially lead to increased retail occupancy at existing retail spaces. Additional information has been added to Appendix P of the Final EIS on the anticipated economic benefits associated with visitor spending of guests at the proposed low-impact lodging.
In Chapter 2, Purpose and Need for the Proposed Action, this language is used: “However, Kamehameha Schools does not have control over all external forces that create these conflicts (e.g. other bay landowners, use and access by the general public, or government regulations). Kamehameha Schools lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities. I don’t see how such “conflicts” are the catalyst for such a drastic change, and one that many in the community don’t want.	Elizabeth Dunn	<p>As part of the planning process for the KBMP, Kamehameha Schools engaged with a wide range of stakeholders and has incorporated community concerns, including firsthand observations about pedestrian safety, traffic congestion, and the impact of incompatible activities at the bayfront.</p> <p>Stakeholders highlighted several pressing issues, notably the absence of sidewalks along Kaleiopapa Street, which forces pedestrians to walk on the roadway alongside vehicle and boat trailer traffic. The limited turnaround space at the end of Kaleiopapa Street further exacerbates congestion. It has also been cited that when cultural ceremonies occur, such as those at the Kauikeaouli birthsite, participants often occupy the roadway, leading to conflicts with vehicular traffic, noise, and a diminished experience for those involved in spiritual or ceremonial observances.</p> <p>The KBMP is designed to address these challenges through its comprehensive management strategies. These include the proposed development of pedestrian-oriented infrastructure and improved circulation patterns to enhance safety and efficiency. Importantly, the plan proposes reactivating the historic Old Kona Road as a throughway to better manage traffic flow and redirect it away from sensitive cultural areas.</p> <p>A significant component of the project also includes increasing parking capacity at the existing northern parking lot as well as providing more parking spaces than required at the new commercial center. This will relieve pressure on informal roadside parking. Pedestrian pathways will offer direct, safe access from the parking area to community spaces along the bayfront. Clear signage, well-marked crosswalks, and other visual cues will further</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>support intuitive wayfinding and discourage walking along the roadway.</p> <p>Please refer to EIS Section 3.2.5 for more information on parking and pedestrian circulation.</p>
<p>Clear title to lands within the project area There are at least 12 individuals who received Land Commission Awards for land within the proposed project area. These 'ohana who have royal patents to the lands within this proposed development. 'Ohana are still in Kona. I have the following questions: Where is the chain of title to show proof of sale for RP 3888, RP 6391, RP6842, RP 4437, RP 6367, RP 7891, RP 8023, RP 4579, and RP Haluapo (Table 4-1)? Have the descendants of these LCA awardees been notified of this development? Have the descendants of these LCA awardees and those whose 'ohana frequented? Keauhou been consulted regarding the significance of archaeological remains?</p>	<p>Loke Aloua</p>	<p>Beginning in 1964, the Keauhou Development Corporation (KDC) began the acquisition of various kuleana parcels in connection with the previously proposed development of Keauhou.</p> <p>Based upon the history of these acquisitions, in 2010, Kamehameha Schools initiated consultation with lineal decedents of Keauhou and Kahalu'u, which consultation continues today. During an early consultation meeting in the Fall of 2016, 'ohana of Keauhou and Kahalu'u shared concerns about long-standing issues in the area. They cited congestion, limited access, and the impact of inappropriate commercial and recreational activities that have eroded the bay's historical and cultural identity. Please refer to Chapter 7 of the FEIS, detailing the level of consultation conducted with lineal descendants as well as other stakeholder groups.</p> <p>Input from lineal descendants and the community guided the formation of the Keauhou Bay Management Plan (KBMP) and identification of the plan's management strategies. Multiple listening sessions and project updates, including presentations of concepts, were provided throughout the planning process. Kamehameha Schools continues to be open to meeting with other lineal descendants that decide to come forward.</p> <p>Lineal decedents were notified of the publication of the KBMP Environmental Impact Statement Preparation Notice (EISPN) and Draft Environmental Impact Statement (DEIS). Lineal descendants were also provided individual copies of the Draft EIS to ensure their access to the document and ability to review at their convenience.</p> <p>Kamehameha Schools acknowledges these concerns and recognizes the need for meaningful change at the bay. Addressing these concerns was one of the driving forces behind the decision to develop a comprehensive management plan for Kamehameha</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>Schools’ lands at Keauhou Bay. While these feelings persist, there is an opportunity to provide healing by acknowledging past perceived wrongs and creating pathways for reconnection to the ‘āina at Keauhou Bay for generations to come. The KBMP is designed to help bring ‘ohana back to Keauhou Bay through increased access to the shoreline and establishment of new opportunities for place-based cultural educational programming in existing bayfront buildings that will be transitioned out of commercial use.</p> <p>A discussion of the Land Commission Awards and the history of the Kuleana Acquisition Program is provided in Section 4.1.1 of the FEIS.</p>
<b>Keauhou Canoe Club</b>		
<p>Don't you dare interfere with the Keauhou Canoe Club! It meets all the criterion for the items you mentioned are important for this project.</p>	Barry Willis	<p>Implementation of the KBMP is not anticipated to adversely impact KSS operations. The Project seeks to encourage the perpetuation of Hawaiian outrigger canoe paddling practices at Keauhou Bay. Please refer to EIS Section 4.10 for an evaluation of recreational resources.</p>
<p>Keauhou Canoe Club is a non-profit 501c3. We are not a commercial operator.                      The “hustle and bustle atmosphere” (Sec. 3.2.3 paragraph 3) is indeed a daily occurrence however Kili‘ilinehe Park which has managed access is not the only locale of managed practices and stewardship.</p> <p>Having been a lessee of Kamehameha Schools (formerly Bishop Estate) for forty years, KCC has always been a Hawaiian racing club. The canoe club has promoted Hawaiian canoe koa racing, Hawaiian culture, and the preservation of the koa canoe. Traditional practices and education thrive with concentrated focus on local area children ages 7-18.</p> <p>Supporting that kuleana, are numerous mālama kōkua; individuals who preserve and uphold tenets of ‘ohana wa‘a with particular care of the koa canoe. Adornments of offering</p>	Noelani Campbell	<p>Mahalo for clarifying that the Keauhou Canoe Club is a non-profit organization. The Project seeks to encourage the perpetuation of Hawaiian outrigger canoe paddling practices at Keauhou Bay. Please refer to EIS Section 4.10 for an evaluation of recreational resources.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>and protection are prepared by highly skilled lei makers (KCC members) where cultural propriety is applied in the harvest, preparation, and integrity of the lei produced. Kanaka Maoli are at the helm of cultural rearing and coaching of our youth and supported in all ways Hawaiian by member kōkua. Piko and pule are at the center of ‘ohana wa’a which is conducted at practices, races, and relevant gatherings.</p> <p>By the start of the first regatta, with guidance, piko is led entirely by nā poki’i for the leadership, coaches, parents, and the entire racing program (keiki, ‘ōpio, kāne, wāhine).</p> <p>The statement "Keauhou Bay offers a unique opportunity to infuse culture and education" (Sec. 3.2.3 paragraph 6) speaks to a potential that has already been realized and is ongoing at KCC. Education (historical, wahi pana, ali’i, nā mea wa’a, mo’olelo) and mālama ‘Āina Pauahi are at the forefront of the canoe club’s kuleana; steward the children, steward the land.</p> <p>The recreational paddling program is a component of KCC’s endeavors. We do not conduct any for-profit activities as do the other recreational entities operating at Keauhou Bay. There is no signing up for tours; only pre-planned educational/outreach opportunities for the community and the community at large. This component provides an opportunity to further create reverence and respect for those who are not familiar with Keauhou’s historical significance.</p> <p>Our pa’a Culture Committee has worked diligently in providing these avenues of learning. Various resource specialists are invited to present aspects of Hawaiian ancestral knowledge, history, social/economic organization, resource management/sustainability, and the implications of rights and privileges viewed through a Hawaiian lens (kuleana).</p> <p>‘Āina Pauahi has provided me the physical, spiritual, and cultural connections necessary to be a worthy keeper of nā</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>mea Hawai'i and the ha'i mo'olelo kūpuna a me nā ali'i o Keauhou. As Kamehameha Schools reimagines this corridor for the future, seeds have long been planted and sprouted with profound yield especially in our strong youth racing program. Our keiki and 'ōpio are ma'a to traditional koa canoe practices of care, adornments, and protocols as well as all aspects of 'ohana wa'a.</p> <p>As we prepare for the coming months/years, we remain, committed to Pauahi's legacy established in our Mission Statement and terms of our lease agreement.</p> <p>I feel a great sense of responsibility to those who came before me, who gave me the inheritance of place and connection, and all the sacrifices they made for me to be here. It is for this reason, I remain accountable to the children who will inherit all that is Keauhou.</p>		
<p>It will also displace an important gathering place for the young people of the island who are learning canoeing through the keauhou bay canoe club.</p>	Lisa Sterritt	<p>The KBMP will not displace people from shoreline use or prevent access for canoe activities as suggested. Kamehameha Schools, through the KBMP, specifically recognizes and supports the continuation of canoe activities at Keauhou Bay. Public shoreline access will not be restricted; rather, it will be enhanced through the creation of new accessible walking paths and expanded open spaces at Ka'ili'ilinehe Beach Park. Please refer to EIS Section 4.10 for an evaluation of recreational resources.</p>
<b>Public Beach Access</b>		
<p>On a daily basis we have people trespass across our property at 78-131 Ehukai St. They came from the shoreline public access area on your property at the Outrigger and from your vacant and unsupervised lot on the Northeast end of Ehukai St where you plan to create the commercial spaces. Our property extends to the high-water mark according to the shoreline survey on file with the County. This is a fixed lava rock shoreline with cliff, which has not changed in generations. This lava rock shoreline with cliff does not allow passage across the waterfront without</p>	Peter McCormick	<p>Kamehameha Schools does not have jurisdiction nor authority to enforce restrictions on trespassing or access on properties it does not own and guides other private property owners to work directly with law enforcement to address trespass issues.</p> <p>The property mentioned is located outside of the KBMP project area, however, Kamehameha Schools remains open to continued dialogue with neighboring property owners regarding general security measures, signage, and other cooperative strategies to promote safety and respect for property boundaries.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
trespassing. The high-water mark is below the cliff level. There is no public right of passage in this area. It is not a beach access corridor nor has the County taken the necessary steps to condemn and buy the land to form a public right of way. Therefore, we would like you to take immediate action to address this issue and incorporate this into your development plans. Signage, physical barriers, and plantings would all help.		
The Project appears to block public access across publicly owned property. According to the maps attached to the EIS, there is publicly owned property extending from the end of Kamehameha III Drive to the boat dock area. There is currently a path that extends from the end of Kamehameha III Drive to the boat dock area that allows access to the boat dock area, however, the Project proposal maps appear to block the publicly owned path. It appears that the Project proposes to block access to the public across publicly owned property.	Jennie Shield	<p>The KBMP is designed to preserve and enhance access throughout the Project Area. Please refer to EIS Section 3.2 for a discussion of the Proposed Action and upgrades to pedestrian infrastructure. Figure 3-35 illustrates the network of pedestrian pathways connecting the north and south sides of the bay.</p> <p>The right of access to Hawai'i's shorelines includes the right of transit along the shoreline and within beach transit corridors. Beach transit corridors are defined as the areas extending seaward of the shoreline and these areas are considered public property (HRS §115-5, HRS §205A-1). Public shoreline access will remain preserved throughout project implementation. There are no actions proposed to block access across publicly owned property.</p>
The Project Blocks Public Access Across Publicly Owned Property Based on the maps attached to the EIS, there is publicly owned property extending from the end of Kamehameha III Drive to the boat dock area. Currently, there is a path that extends from the end of Kamehameha III Drive to the boat dock area that allows access to the boat dock area. (Personal observation and use.) However, the project proposal maps appear to block existing publicly owned path from the end of Kamehameha III Drive to the dock area. Project proponent misleading fails to identify the existing path and access across publicly owned property. Nevertheless, the Project proponent proposes to block access to the public across publicly owned property, which is illegal. As a result, the EIS must be rejected and the current	Jeff Caufield	<p>The KBMP is designed to preserve and enhance access throughout the Project Area. Please refer to EIS Section 3.2 for a discussion of the Proposed Action and upgrades to pedestrian infrastructure. Figure 3-35 illustrates the network of pedestrian pathways connecting the north and south sides of the bay.</p> <p>The right of access to Hawai'i's shorelines includes the right of transit along the shoreline and within beach transit corridors. Beach transit corridors are defined as the areas extending seaward of the shoreline and these areas are considered public property (HRS §115-5, HRS §205A-1). Public shoreline access will remain preserved throughout project implementation. There are no actions proposed to block access across publicly owned property.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
public access preserved in future versions should be Project wish to move forward.		
Please also address for me: how will you ensure dedicated public access to the shoreline during construction? And how do you aim to preserve the peaceful and shady nature of the shoreline on site, both during construction and after, so local people like myself can continue to enjoy it? Because it is not true that local folks are uncomfortable there. Lots of local folks (both Hawaiian and non Hawaiian) go daily, to fish and cool in the water and paddle and picnic and play volleyball. And on the weekends it's crowded with local folk. I see this with my own eyes. Everyone parks on the north side of the bay on Kamehameha III Rd, where there is plenty of parking, always.	Marjorie Bryant	The KBMP is designed to preserve and enhance access throughout the Project Area. Please refer to EIS Section 3.2 for a discussion of the Proposed Action and upgrades to pedestrian infrastructure. Figure 3-35 illustrates the network of pedestrian pathways connecting the north and south sides of the bay.  The right of access to Hawai'i's shorelines includes the right of transit along the shoreline and within beach transit corridors. Beach transit corridors are defined as the areas extending seaward of the shoreline and these areas are considered public property (HRS §115-5, HRS §205A-1). Public shoreline access will remain preserved throughout project implementation.
Will He'eia Bay be accessed through this project area? How?	Claudia Rohr	He'eia Bay is not located within the Project Area. As such, no actions to connect the Project Area to He'eia Bay are proposed.
<b>Volleyball</b>		
I have been running a free volleyball league at Keauhou Bay for almost 40 years, consisting of 120 local youth members. These kids will have nowhere to go to play volleyball if this resort is built there.	Kimberly Gay	The Project involves the establishment of a recreation corridor, expansion of open space, and improved access to the shoreline. To implement all the elements of the KBMP, specific decisions related to redefining uses of spaces resulted in a need to consider the relocation of the volleyball court. Kamehameha Schools has consulted with the County of Hawai'i Planning Department, elected officials, and representatives of the Kona area to discuss how outdoor recreational activities such as volleyball can be planned in more appropriate areas.
Destruction of the Sand Volleyball Courts There were two sand volleyball courts located on the east end of Keauhou Bay historically. According to locals, the existing volleyball court located at the western edge of the Project proponent's property has been in continuous use by the public. Due to the limited availability of volleyball courts locally, this is the primary one used by local adults and children. Until the Project proponent cleared land to create the northern	Jennie Shield	EIS Section 4.10 discusses recreational resources. The Project involves the establishment of a recreation corridor, expansion of open space, and improved access to the shoreline. The uses proposed are compatible with standard beach parks. To implement all the elements of the KBMP, specific decisions related to redefining uses of spaces resulted in a need to consider the relocation of the volleyball court.

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>parking lot and boat parking, there was a second court that was similarly used. The Project proponent proposes to eliminate both volleyball courts and instead plant grass in the area as “open space.” The DEIS does not analyze the impacts of eliminating the existing volleyball court nor the impact on the local community who enjoy it. The Project does not include replacing the second volleyball court that was damaged by the excess runoff caused by prior land clearing. Lastly, a large grassy area is incompatible with historical and current uses of that area. Historical photographs show the East end of Keauhou Bay as sandy beach all the way up to the base of the hill to the East of the existing volleyball court.</p>		<p>Kamehameha Schools does not have an agreement with any entity regarding the use of the existing or former volleyball court. The volleyball courts represent an informal and unapproved use of Kamehameha Schools’ property. While residents have enjoyed the privilege of utilizing the courts in the past, Kamehameha Schools has no obligation to maintain, reconstruct, or provide improved facilities for this purpose. Future use and management of the area will be aligned with the goals and strategies outlined in the KBMP.</p> <p>Kamehameha Schools has consulted with the County of Hawai’i Planning Department, elected officials, and representatives of the Kona area to discuss how outdoor recreational activities such as volleyball can be planned in more appropriate areas.</p>
<p><b>Destruction Of The Sand Volleyball Courts Violates Proponents Charter As Well As Access To Publicly Owned Property</b> Historically, there were two sand volleyball courts located on the east end of Keauhou Bay. One of the sand volleyball courts was located at the western edge of Project proponents' property, which is the existing volleyball court. According to locals, the existing volleyball court has been in continuous use by the public, including locals and in particular local kids for at least 35+ years. Dozens of comments have been submitted stressing the importance of the sand volleyball courts to the local community. With the limited number of sand volleyball courts available locally, this is the primary sand volleyball court used by local kids who want to learn how to play sand volleyball. As women's sand volleyball is now a collegiate sport and men's sand volleyball is also poised to become a men's collegiate sport, the existing volleyball court is a critical resource for local kids hoping to not only learn how to play volleyball, but also pursue potential college scholarship opportunities. Notably, sand volleyball is one of the sports that most represented by local Hawaiians in the Olympics. Up until Project proponent cleared land to create the northern parking lot and boat parking, there was second sand volleyball court that was similarly used by locals. Project proponent proposes to</p>	<p>Jeff Caufield</p>	<p>EIS Section 4.10 discusses recreational resources. The Project involves the establishment of a recreation corridor, expansion of open space, and improved access to the shoreline. The uses proposed are compatible with that of standard beach parks.</p> <p>To implement all the elements of the KBMP, specific decisions related to redefining uses of spaces resulted in a need to consider the relocation of the volleyball court.</p> <p>Kamehameha Schools does not have an agreement with any entity regarding the use of the existing or former volleyball court. The volleyball courts represent an informal and unapproved use of Kamehameha Schools’ property. While residents have enjoyed the privilege of utilizing the courts in the past, Kamehameha Schools has no obligation to maintain, reconstruct, or provide improved facilities for this purpose. Future use and management of the area will be aligned with the goals and strategies outlined in the KBMP.</p> <p>Kamehameha Schools has consulted with the County of Hawai’i Planning Department, elected officials, and representatives of the Kona area to discuss how outdoor recreational activities such as volleyball can be planned in more appropriate areas.</p> <p>The KBMP does not propose any alterations to the existing seawall along the Keauhou Bay shoreline. There are no planned uses or</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>eliminate BOTH volleyball courts and instead grass in the area as "open space." There is no analysis as to the impact of eliminating the existing volleyball court nor the impact on the local community and uses. Currently, there is roughly 10-20+ adults and kids that utilize the existing volleyball court on a daily basis. Accordingly, Project proponent should be required to analyze the impact of eliminating the existing volleyball court. There is nothing in the Project that would replace the 2 nd court that was damaged by the excess runoff caused by land prior land clearing activities. At a minimum, the Project should be required to replace the 2 nd volleyball court that was damaged by Project proponent's activities and to ensure that future runoff is controlled so it does not impact the sand volleyball court. Notably, historical photographs (See attached historical photograph from 1890) show that the East end of Keauhou Bay was a sandy beach ALL of the way up to the base of the hill to the East of the existing volleyball court. The seawall appears to be a late addition built within the existing high tide area. (See historical nautical chart dated 1949, which does not note the presence of any seawall.) Based on the 1949 chart, the seawall itself appears to have been constructed below the mean high tide line, which appears to be publicly owned land. Thus, a large grassy area constructed on Project proponents' property and on the publicly owned lands is incompatible with both historical and current uses. There is no analysis of the impact of the removal on historic cultural uses and current uses. To be consistent with historical uses on both the public lands and lands within the historical mean high tide, Project proponent should be required replace the sand that has been lost and to ensure that it cannot be washed away by excess runoff. Due to the failure to analyze the impacts of the sand volleyball court removal, proposed construction on publicly owned lands and within the mean high tide and the failure to consider future impacts, the EIS should be rejected. (Not to mention the failure to address seawall that is falling down.) Moreover, if</p>		<p>developments in the immediate vicinity that would require alterations to the seawall or affect its current function.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Project proponent should consider moving forward in the future, the sand volleyball courts should both be replaced, the drainage fixed and maintained by Project proponent. All of the above should be supported by adequate usage and projection studies.</p> <p>The EIS Fails To Address Congestion Caused Elsewhere By The Removal Of The Sand Volleyball Courts. It is my understanding that literally dozens of comments have been received outlining the usage of the volleyball court and negative impact from its removal. The remaining court is utilized on a daily basis by the public and local kids. It is a long-standing tradition that family's barbeque locally and play on the volleyball courts every weekend. With the removal of the remaining court, the usage will be transferred to already congested sand courts at Magic Sands Beach and Coconut Grove creating both congestion and usage conflicts elsewhere. The EIS fails to analyze existing usage nor where the existing usage would be relocated. It fails to address potential congestion caused at the other locations by the court removal. A study needs to be conducted of existing usage and the impact of shifting that usage to the 2 remaining sand volleyball courts in the area.</p>		
<p>inter alia irreversible environmental damage, loss of native flora and fauna on land and sea, the local people's peaceful enjoyment of swimming, sailing, canoeing, volleyball will be lost.</p>	Theresa Coe	<p>The KBMP is designed to reorganize the uses and activities within the bay to better reflect the cultural significance of the area and to support a more harmonious relationship between users, place, and purpose. Central to this reorganization is the concept of directing new growth to appropriate areas while preserving culturally sensitive areas near the shoreline. To resolve long-standing conflicts between incompatible uses, the KBMP proposes relocating certain commercial operations, particularly those that are currently situated near sensitive cultural sites, to more suitable areas above the 'Ahu'ula cliff and along Kaleiopapa Street. By moving these uses away from the bayfront and heritage zones, the plan protects sacred spaces and allows for cultural practices to thrive without interference.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		The Project will result in enhanced shoreline access for activities like swimming, sailing, and canoeing. The Project involves the establishment of a recreation corridor, expansion of open space, and improved access to the shoreline. To implement all the elements of the KBMP, specific decisions related to redefining uses of spaces resulted in a need to consider the relocation of the volleyball court. Kamehameha Schools has consulted with the County of Hawai'i Planning Department, elected officials, and representatives of the Kona area to discuss how outdoor recreational activities such as volleyball can be planned in more appropriate areas.
<b>Recreational Activities</b>		
Keauhou Bay holds a special old time feeling with its canoe club under the trees, a sweet stretch of beach and the small bay. The pier and the various boats complete the picture. If development goes ahead, all of this will be lost as these activities will be relocated and with them will go the history of the area.	Pamela Wang	The KBMP does not proposed to relocate canoe facilities. The Project aims to increase access to the shoreline by providing new recreational opportunities, improved pedestrian infrastructure, and better access points for ocean activities. The recreation corridor, enhanced shoreline paths, and preserved open space will help maintain the diverse activities currently enjoyed by the community, including canoe paddling, fishing, swimming, and other water sports.
Many others will provide additional details on Draft EIS deficiencies. Selected comments are: 1. The Plan claims to increase access to Keauhou Bay by Kama'aina and Kupu'aina ("create a greater sense of inclusivity at the bayfront", pg. 1-14), yet development of high-end hotels and commercial activity (which is the essence of this Plan) elsewhere in the Islands has previously and consistently resulted in the exact opposite effect. Keauhou Bay provides one of the few areas for ocean access in Kona and is used heavily by Hawaiians, other locals, visitors, families, churches, community groups, fishermen, swimmers, bobbers, paddlers, those on SUPs, kayakers, local volleyball	Peter Matlock	The KBMP is designed to reorganize the uses and activities within the bay to better reflect the cultural significance of the area and to support a more harmonious relationship between users, place, and purpose. Central to this reorganization is the concept of directing new growth to appropriate areas while preserving culturally sensitive areas near the shoreline. To resolve long-standing conflicts between incompatible uses, the KBMP proposes relocating certain commercial operations, particularly those that are currently situated near sensitive cultural sites, to more suitable areas above the 'Ahu'ula cliff and along Kaleiopapa Street. By moving these uses away from the bayfront and heritage zones, the

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>players, and children jumping for hours into the water. There is little confidence these activities will continue if surrounded by high-end hotels, retail, and restaurants. It is difficult to give KS credibility for its claims to help people, when it has for years not fixed its restrooms at the Ka’ili’ilinehe Beach Park—which is the most basic of steps to encourage a "greater sense of inclusivity."</p>		<p>plan protects sacred spaces and allows for cultural practices to thrive without interference.</p> <p>The KBMP is designed to improve conditions at the bay by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the Project Area are designed to support and sustain cultural and environmental preservation efforts. Implementation of the Project will also allow Kamehameha Schools to make necessary upgrades and repairs to its facilities and alleviate issues of illegal camping and litter.</p>
<b>Land Use</b>		
<p>In 2008, Kamehameha Schools said this when demolishing the Lagoon and Keauhou Beach hotels to add a more appropriate cultural park: "Our charter for future development here is to make things pono, or right, to solve the mistakes of the past and move ahead. We want to make sure that any and all future development in Keauhou, first and foremost, is culturally correct." The proposed resort is in conflict with this statement.</p>	<p>Kathleen McMillen</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan’s implementation can be self-sustaining. Long-term management of the bay’s natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>
<p>User Conflicts. KS has developed the Keauhou Bay Management Plan (“KBMP”) to “reorient uses at the bay and establish new place-based cultural education and revenue generating opportunities.” The EISPN recognizes that Keauhou Bay is “highly used by residents, visitors, and community groups, which creates congestion and competing interests.” KS then describes the purpose of the Project that is the subject of the EISPN is to: “develop resilient</p>	<p>Rebecca Melendez</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>communities by stewarding the ‘aina to support resilient economies, cultural landscapes, diverse learning, and career pathways.” Concluding that: “The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keauhou Bay based upon community and organizational values that were identified during the Management Plan process.” (EISPN 1-1) Pregnant in all of this is the potential for renewed conflicts between the customers of a 156-unit “Appropriate Boutique Resort.” Estimating an average of two to four people per unit could mean a daily occupancy of between some 300 to 600 guests. These people would come from very different backgrounds and have purposes in coming to Hawai’i that could well conflict with and overwhelm the residents of Hawai’i who now use Keauhou Bay for very different purposes. The EIS must take a “hard look” at these potential conflicts and offer transparent and effective alternatives to address them, including “no action” on the resort development.</p>		<p>meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan’s implementation can be self-sustaining. Long-term management of the bay’s natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The DEIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action. Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p>
<p>Many visitors have moved beyond the mindset when resorts nodes were developed to exclude local culture; visitors seek enriching experiences that, while comfortable, allow an opportunity to learn about and celebrate local, and especially indigenous culture. The new development should reflect that evolution in the visitor industry. KS has truly remarkable resources and the ability to realize an inclusive, restorative, and transformative vision for this place. I strongly urge you to reconsider you plan and restore the Royal Holua. It was already overrun and abandoned once before. Second chances don’t come often. If you proceed as planned, the Holua will be lost. I would be happy to talk further with KS about any of these ideas. I plan to stay in this area and want to help make it the best it can be for present</p>	<p>Michael Herbert</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan’s implementation can be self-sustaining. Long-term management of the bay’s natural and cultural resources is made possible through a sustainable tourism model that uses revenue</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
and future generations. The land and waters of Keauhou Bay have a powerful story to tell; let the story be told		<p>from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>In 2010, reactivation of Kāneaka Hōlua was initiated through vegetation clearing and community-based mapping programs. This initial effort sought to reestablish the site as a prominent landmark across the Keauhou-Kahalu'u landscape, with the mapping programs offering opportunities for descendants and students to reconnect to place and celebrate the heritage of Keauhou.</p> <p>In 2019, a 3D model of Kāneaka Hōlua was created for inclusion on the Kamehameha Schools cultural heritage website. The goal was to digitally preserve existing conditions of the hōlua and to provide a venue to share the grand architecture and mo'olelo of Kāneaka to a broader audience.</p> <p>The KBMP recognizes the Hōlua slides' cultural and historical importance. The exact historic alignment of the Hōlua slides is unknown; however, the project seeks to honor its projected course by preserving open spaces along the areas where the slide may have traversed. Additionally, the project proposes installing an 'ili (stone pebble) treatment along the Old Kona Road, marking the potential crossing location of the hōlua to further commemorate this culturally significant feature.</p> <p>As part of Kamehameha School's continued stewardship commitment, the KBMP has been developed to build upon existing and ongoing cultural stewardship efforts at Keauhou Bay. The KBMP is anticipated to result in beneficial impacts designed to honor and perpetuate the wahi pana for present and future generations.</p>
This is not right I'm for restoring the land, and the history, and the culture and the heritage. it is not right that you guys say it's for the people and for the land when all I can see is a big outline that says resort, we do not need another resort we do not want another resort. you guys need to do better on the behalf of the Hawaiian people. They should be Hawaiian homes so Hawaiian don't have to keep moving	Mesepa Gomes	The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>away. I don't see how another resort is going to help the lamb or the ocean. All I see is money and greed in this project. but it doesn't matter what the people have to say you guys will do what you guys wanna do no matter what the Hawaiian people have to say and keep using Your power for money there is so much other things you guys can do with this land but yeah here's another resort. That's all I have to say. Do better Kamehameha schools.</p>		<p>support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>
<p>Instead of building new hotels, we should take care of local people to make sure they have everything they need before we cater to more tourists. Do we have enough resources? We don't have enough hotel rooms?</p> <p>Make a food farm instead, so we don't rely on the mainland. We should focus on remodeling existing places and not disturb precious historic land. And locals deserve more than WORKFORCE housing, no balcony, just so minimal, I despise the word WORKFORCE!!!</p> <p>Build low income housing with gardens and balconies, do something meaningful for Hawaiians. Thank you</p>	<p>Marlies Lee</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The Project does not involve the development of new residential housing units. The additional jobs and incomes associated with the Project would contribute to residents' ability to pay for housing needs. A housing alternative is considered in the EIS however, housing uses would require more parking and infrastructure demands than low-impact lodging uses and would thereby result in increased traffic-related impacts and potentially utility demands. Due to the location and topography, the construction of housing units would be comparatively much more expensive to build, limiting their affordability for local residents in the region. Table 6-1 of the EIS provides a detailed evaluation of the Housing Alternative.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>More development is not needed saving nature as nature had intended the lands to be used is what we should be concentrating on please no more resorts</p>	<p>Brian Liddy</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>
<p>It is with a heavy heart that I write my response to the EIS below. I was fortunate enough to be born as the granddaughter to a very special wahine, Tutu or aunty Lily Kong who was the last person to be born and raised in Keauhou Bay. She dedicated her life to the preservation of the bay and through her I learned about our cultural heritage as Hawaiians and the rich history and culture of Keauhou Bay. There is no place that still exists like Keauhou Bay. Having been the birth site and home site to many of our ali'i signifies its importance to Hawaiian culture and indigenous people. Its ability to self-sustain its population and those of neighboring ahupua'a through recent history makes this a very special place that could be lost if KS chose to develop the property to its full capacity of 700+ units vs the 150 units it proposes. Contrary to what some people have recently said of my grandmother, she was not against development. She was against certain developments and development in ways that did not properly care for the land, preserve cultural and historical sites and displaced indigenous people. She knew, with no modern industry other</p>	<p>Leiola Augustine                      Kaleiolani                      Pasciuta</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>than tourism, that development was inevitable in Kona. Without development such as all the condos, hotels and vacation rentals that surround Keauhou bay where would people who wanted to vacation here stay? Where would people who wanted to move here live? Without the economic contributions of those people how would future generations live in this modern, technological society? She knew that in order for the following generations to thrive in a modern world that new skills through education would be required, but how are indigenous keiki going to be educated? How would they obtain the skills and resources to make a life among outsiders who had more economic and educational resources than we had here? Our princess Pauahi, through her schools and education programs are one of the few ways keiki would be able to learn those skills. She understood, and I currently live, the complex and complicated dichotomy of preserving our 'aina and culture while living in a modern world. I'd like to make it clear that my preference is to see no further development in the bay and to actually remove certain features such as the seawalls that cover the beach and the restroom at Kailiilinehe that covers the spring and stop all commercial activity in the bay so the bay can return to its natural state. However, I also know that some of this is not realistic and therefore appreciate a private landowner who is willing to work with the community to ensure the property is developed with community involvement and with as much integrity as possible. Volume I section 6.1 states: "Without comprehensive improvements, the Kamehameha Schools-owned properties would remain underutilized and underperforming financially". It might be helpful for those who oppose this development to understand that KS and the trustees are bound by the trust to financially increase the endowment for our lahui. I welcome those opposed to this development and KS to think outside the box and offer another avenue for these lands that will achieve the desired financial benchmark other than a commercial and resort development. Those opposed, please understand that</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
without meeting this financial benchmark or offering some other source of educational or financial support, you are continuing to displace indigenous Hawaiians and taking away from our lahui. Regarding the "underutilized" portion of the above statement I do feel as though we should leave some of these areas as just that. Not utilized at all. I do believe and appreciate that our cultural sites are to be preserved with this new plan, but want to ensure that KS recognizes and understands that there is increasing sensitivity amongst indigenous Hawaiians as to not market our culture for financial gain or for our culture to be on display as a novelty. As a suggestion, let the families or those organizations that bear the responsibility of maintaining those sites or take ownership of the cultural significance of those sites, the freedom to choose who, how and if those sites, customs and history shall be shared.		
I strongly oppose the plan of Kamehameha Schools as they should be preserving this important cultural area as open land and cultural center to educate as they promise. They have an abundance of other commercial properties they can profit from. This area should be preserved w no housing for the affluent!	Helene Spencer	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The Project does not involve the development of new residential housing units. The additional jobs and incomes associated with the Project would contribute to residents' ability to pay for housing needs. A housing alternative is considered in the EIS however,</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		housing uses would require more parking and infrastructure demands than low-impact lodging uses and would thereby result in increased traffic-related impacts and potentially utility demands. Due to the location and topography, the construction of housing units would be comparatively much more expensive to build, limiting their affordability for local residents in the region. Table 6-1 of the EIS provides a detailed evaluation of the Housing Alternative.
Please be aware that more hotel development is not needed nor wanted in Keauhou Bay. please be more responsive to the community ....as it is the bay is over run with activities that destroy geography and vibe of a once pleasant place for all....NO to another non essential hotel.	Carol and Scott Fuller	The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.
I am emailing to voice my opposition to the planned resort by Kamehameha schools at Keauhou Bay. I am tired of seeing our coastlines be used for the rich and for tourists. I am tired of seeing the minimal recourses and the limited infrastructure being prioritized for the rich and tourists. The worst part is most of these lands are either apart of the Hawaiian homes system, bishop estate, Kamehameha schools or Liliuokalani trust, or once were. Sold to the highest bidder or used for the benefit of people who only bring further gentrification.  Save Keauhou Bay, don't gentrify it!!! Perpetuate what Kamehameha schools and all these other Hawaiian	Lindsey Caldwell	The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
organizations were really meant to be, instead of using them to deepen pockets of people who do nothing for Hawaiians. No More Resorts!!!!		possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.
Justify building a resort that will benefit a few while severely impacting the community by the loss of one of the last historically untouched areas on the island that has not been overdeveloped and has been beloved by locals and visitors for many decades.	Cory (No last name provided)	The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.
Keauhou Bay already has one large hotel and numerous other rental housing units adjacent to its shore	Jeffrey and Leann Malison	The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
I DO NOT support development of a 150-unit transient accommodations lodge in this area. Hotel, condotel and other STVR opportunities exist in the area that are not at capacity.	Mary Cowen	The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.
The current facility is under investigation to determine its impact on Honokohau Harbor and neighboring waters. Can KSBE find a less impactful use than a Resort/ Restaurant? *Is there a development idea that would be much less impactful to our already strained services?	Rolin Stonebraker-Soles	The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.
I fully support all the scientific reasons this is a terrible plan... and I can help being very anger about the potential destruction of an area that has been very Kama'aina	Deborah Green	The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
friendly... watching the keiki run on the beaches, jump into the ocean and enjoy themselves... family picnics, canoeing... etc. This really takes a beautiful, wonderful and much enjoyed location away from those who love and treasure it...just for the sake of adding another tourist resort...NO! It's wrong.. greedy and destructive.		active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.
Aloha, I am writing regarding concerns in the Keauhou Bay development project. Whereas I am happy it includes some restoration of cultural sites, I believe tourism housing and promotion overall in this area is a mistake. I have seen the damage tourism has done to the waters off Kona in the past 20 years, and without mandatory education and control of human impact, this will only worsen.	Keri Jones	The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.
Keauhou bay should be preserved without further development, for the sake of its historical, cultural and natural significance. As a local residence within a couple miles of the intended site, there is zero positive impact to be gained for the people of Keauhou.	Jacquelin Sabin	Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.  The DEIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action.

Summary of Draft EIS Comments and Responses		
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		<p>Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p>
<p>Please stop and think what r u doing we dont need more development we need the structure that are here redone and remodeled.</p>	<p>Keli Blincoe</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan’s implementation can be self-sustaining. Long-term management of the bay’s natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>
<p>I strongly oppose any development that will have a detrimental effect on the bay and its fragile ecosystem. Also it is shameful that a hotel is being planned to be built there.</p>	<p>Sylvie Madison</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.
To ensure the future resilience of Keauhou Bay's coral reefs, the Keauhou Bay Management Plan should bolster plans to deal with wastewater and stormwater impacts and reconsider development of the proposed resort at Keauhou Bay. On an island with such high housing costs and tourism impacts, it is questionable why a resort is being built here at all, instead of low-income housing reserved for locals and not tourists. Locals are the ones who use and appreciate Keauhou Bay's coastal resources year-round, and these resources should not be further degraded by development in support of tourism.	Orion McCarthy	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The Project does not involve the development of new residential housing units. The additional jobs and incomes associated with the Project would contribute to residents' ability to pay for housing needs. A housing alternative is considered in the EIS however, housing uses would require more parking and infrastructure demands than low-impact lodging uses and would thereby result in increased traffic-related impacts and potentially utility demands. Due to the location and topography, the construction of housing units would be comparatively much more expensive to build, limiting their affordability for local residents in the region. Table 6-1 of the EIS provides a detailed evaluation of the Housing Alternative.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
But I can't in good conscience feel that this proposed resort is good for the area and the community. As the island (and state in general) is entering a period of considering the impacts of overtourism, adding a whole new one in an area that is a historical site with ecological and cultural heritage does not seem aligned with this objective	Jessica Kuzmier	The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.
I as a resident of Hawai'i for 58 years am opposed to any development in this are or Bay on the Big Island of Hawai'i. The area should remain undeveloped except for limited infrastructure.	Marc Davis	Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.  The DEIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action. Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.  The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.
Building bungalows in Keahou bay sounds like an idea not completely thought out. The permanent devastation this would cause based on the environmental impact report	Cydni Richmond	The KBMP is rooted in the principle of mālama 'āina, reflecting Kamehameha Schools' deep commitment to caring for the land through a cultural, environmental, and educational lens. The plan

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>alone should be enough evidence. How about get a little more creative in coming up with ways to fund the school system. I would rather be taxed on a school bond than have Keahou bay permanently ruined. We put our kayaks in the bay frequently &amp; this would ruin the bay!</p>		<p>embraces a long-term stewardship approach that prioritizes the protection and revitalization of both natural and cultural resources within the project area. The KBMP focuses on low-impact design, carefully locating future uses to minimize disturbance, preserving sensitive habitats, and protecting culturally significant sites.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p> <p>Environmental stewardship is also expressed through restoration of native vegetation, landscape design, and preservation of natural water features such as springs and anchialine ponds, which support unique ecological systems. Long-term management of these resources is made possible through a sustainable tourism model that uses revenue from low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>
<p>Instead of building new hotels, we should take care of local people to make sure they have everything they need before we cater to more tourists. Do we have enough resources? We don't have enough hotel rooms?</p> <p>Make a food farm instead, so we don't rely on the mainland. We should focus on remodeling existing places and not disturb precious historic land. And locals deserve more than WORKFORCE housing, no balcony, just so minimal, I despise the word WORKFORCE!!!</p> <p>Build low-income housing with gardens and balconies, do something meaningful for Hawaiians. Thank you</p>	<p>Marlies Lee</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The Project does not involve the development of new residential housing units. The additional jobs and incomes associated with the Project would contribute to residents' ability to pay for housing needs. A housing alternative is considered in the EIS however, housing uses would require more parking and infrastructure demands than low-impact lodging uses and would thereby result in increased traffic-related impacts and potentially utility demands. Due to the location and topography, the construction of housing units would be comparatively much more expensive to build, limiting their affordability for local residents in the region. Table 6-1 of the EIS provides a detailed evaluation of the Housing Alternative.</p>
<p>The Bungalow Resort development will have a detrimental and increasingly deleterious effect on Keauhou Bay; at this time that we are aware of the speeding of our climate crisis, this is unacceptable that this Development project be considered in light of the research available to demonstrate the harm it will bring to our Bay. I would deem it irresponsible for you to accept this proposal, and I am seeing a growing concern from young who you may expect to bring you to court if your stamp of approval allows for this risk to our environment to occur.</p>	<p>Heather Laursen</p>	<p>The KBMP is rooted in the principle of mālama 'āina, reflecting Kamehameha Schools' deep commitment to caring for the land through a cultural, environmental, and educational lens. The plan embraces a long-term stewardship approach that prioritizes the protection and revitalization of both natural and cultural resources within the project area. The KBMP focuses on low-impact design, carefully locating future uses to minimize disturbance, preserving sensitive habitats, and protecting culturally significant sites.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p> <p>Environmental stewardship is also expressed through restoration of native vegetation, landscape design, and preservation of natural water features such as springs and anchialine ponds, which support unique ecological systems. Long-term management of these resources is made possible through a sustainable tourism model that uses revenue from low-impact lodging and commercial</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		operations to fund ongoing stewardship, maintenance, and educational programming.
Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a serious negative impact in Keauhou Bay.	Caroline Visser	Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.  The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the proposed project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.
The Environmental Impact Statement (EIS) for the proposed development of Keauhou Bay raises significant concerns. The bay is a cherished local haven, heavily utilized by residents for a variety of water sports, and is one of the few areas not yet overrun by tourist-centric development. The current restriction of cars has successfully preserved the bay's unique character, making it less congested and more enjoyable compared to other areas in the Kona district. It's crucial to consider that the introduction of additional housing and/or retail spaces for tourists could disrupt the local ecosystem and the community's way of life. Instead of yielding to development pressures, alternative strategies such as establishing an endowment could be explored to enhance Kamehameha Schools' income without sacrificing the bay's integrity. Preserving Keauhou Bay as it is, while focusing on infrastructure improvements, would ensure that this natural gem remains a sanctuary for local culture and recreation for decades to come	Polly and Mark Petersen	The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.
Keauhou Bay is a special place that should be preserved and protected. I do not feel that the addition of a resort would accomplish this.	Linda Churches	The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.
But I can't in good conscience feel that this proposed resort is good for the area and the community. As the island (and state in general) is entering a period of considering the impacts of overtourism, adding a whole new one in an area that is a historical site with ecological and cultural heritage does not seem aligned with this objective.	Jessica Kuzmier	The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.
I am not in support of the proposed "low-density, sustainable bungalow" type resort development. I think the use of the terms "low-density" and "sustainable" are misleading, and only make sense when compared to a potential 745-unit, 7-9 story resort development. However, that comparison is based on the existing resort-zoning, a remnant of a time in Hawai'i when aggressive development rampaged unchecked without consideration of our 'āina or our communities. We have moved on from that, and the development of that type of high-density resorts will be challenged by the people of Hawai'i today, myself included. • I am not in support of the	Lillie Makaila	The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>proposed Kaimukī Retail/Dining component. Firstly, just because you have given inoa Hawai'i to the development zones does not make the zones Hawai'i. They are components of a plan, and the use of inoa Hawai'i seems strategic. Secondly, I do not support commercial development in this special place. The 29-acre site is surrounded by extensive development including commercial and retail spaces. The Keauhou Shopping center is located nearby and is a KS development and source of revenue for the trust. I do not believe that KS needs MORE retail and commercial spaces.</p>		<p>plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The location of the KBMP is ideal for the proposed low-impact lodging due to its existing land use designations (Resort) and surrounding amenities. The Project Area is designated as Urban under the State Land Use District Map (Figure 1-4), which supports resort, retail, and mixed-use developments. The proposed low-impact lodging aligns with this established urban framework and supports the area's planned growth objectives. Additionally, the specific portion of the Project Area designated for lodging is zoned V-.75: Resort-Hotel District under the County of Hawai'i Zoning Code (Figure 1-6), making resort use a compatible and appropriate land use. The surrounding context, including the Outrigger Kona Resort and Spa, residential condominiums, the Kona Country Club golf course, the Keauhou Shopping Center, vacation rentals, and ocean recreation and tour operators, further reinforces the suitability of the site for a low-impact lodging that complements and supports existing community and visitor-serving uses.</p> <p>The proposed lodging is intentionally designed as low-impact, with a low-profile and low-density layout that is well below the maximum development intensity allowed under current County of Hawai'i zoning. Rather than maximizing building heights, unit counts, or commercial intensity permitted in the V-.75 Resort-Hotel District, the design emphasizes small-scale bungalow-style lodging that integrates with the surrounding cultural landscape.</p>
<p>Vote No on Proposed development of Keahou Bay- leave bay as it is</p>	<p>Pat Aarhus</p>	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.</p> <p>The EIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action. Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.
No more. No more building we have more than enough. STOP	Denise Fadem	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.</p> <p>The EIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action. Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p>
Please don't destroy the unique combination of history and community that is Keauhou Bay. Please don't turn Keauhou Bay into another tourist area. There are plenty of tourist areas. This Bay is a unique and individual space that supports local livelihoods. It is the first place some children learn to swim or fish. It is the first place others learn to canoe. By creating "Low-impact housing" on the "resort-zoned plateau" there will be an entire destruction of the pristine natural landscape and a down flow of debris into what the plan calls a "culturally sensitive area." Given that there are already viable housing and recreation areas	Robin Williams	<p>The KBMP is rooted in the principle of mālama 'āina, reflecting Kamehameha Schools' deep commitment to caring for the land through a cultural, environmental, and educational lens. The plan embraces a long-term stewardship approach that prioritizes the protection and revitalization of both natural and cultural resources within the project area. The KBMP focuses on low-impact design, carefully locating future uses to minimize disturbance, preserving sensitive habitats, and protecting culturally significant sites.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>nearby, how can a responsible project address this devastation? By demolishing the current 'ohana of the culture of the Keauhou Bay, this proposal will do a disservice to the entire area. 'Āina should be important for a project that proposes to do so much to "improve the bay." And yet the first goal will be to destroy the beautiful and mature plants and trees living there and displace all the people who currently call Keauhou Bay home away from home.</p>		<p>project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p> <p>Environmental stewardship is also expressed through restoration of native vegetation, landscape design, and preservation of natural water features such as springs and anchialine ponds, which support unique ecological systems. Long-term management of these resources is made possible through a sustainable tourism model that uses revenue from low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>
<p>I would like to ask you not to proceed with developing the Keauhou Bay. The bay is not only sacred but it is cherished by many as it is. By building another cookie cutter development that follow formula, you are escalating the tension with the peaceful community and further isolating the local people who respect the bay.</p>	Non Mon	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.</p> <p>The DEIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action. Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p>
<p>I've read the management plan for Keauhou Bay. I'm trying to figure out how the development of that land, into a proposed bungalow resort, aligns with the plan or the vision of Kamehameha Schools? I can understand the cultural aspect of the proposal and if the plan was to build</p>	Theresa Holderread	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
affordable housing for the community but that doesn't seem to be the case.		maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.
<p>But the current plan is still too much, and will alter the environment, the community, and the character of this place with such significance that we are assured of losing it to becoming another over-used tourist destination, populated mostly by people from outside Hawai'i, with locals once again priced out of the area. What KS calls "low-impact" is only low-impact" compared to what it could do in this resort zoned area, but when you look at the proposal the impact will actually be quite high, and much more significant than the public is being told. For this small area, to build 150 bedrooms in bungalow-style lodgings, along with commercial buildings, vendor kiosks, restaurants, ocean sports rentals, etc., will result in substantial increases in congestion of both vehicles and people, all trying to utilize this small geographic area. Currently Keauhou Bay is a relatively quiet, relaxing place, a remnant of what Hawai'i Island used to be, a reminder of what Hawai'i Island has lost so much of, an experience which is so rare, unique, and special in all the world, that people come from all over the planet to visit it.</p> <p>Any new development should include a maintenance plan to protect the bay environment and maintain nice facilities for the community. To preserve the character and cultural significance of Keauhou Bay and overall region, the community would deeply appreciate KS withdrawing this plan, and returning with one that is more limited in scope, and truly takes into account the needs of our residents.</p>	Aaron Chang	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The location of the KBMP is ideal for the proposed low-impact lodging due to its existing land use designations and surrounding amenities. The Project Area is designated as Urban under the State Land Use District Map (Figure 1-4), which supports resort, retail, and mixed-use developments. The proposed low-impact lodging aligns with this established urban framework and supports the area's planned growth objectives. Additionally, the specific portion of the Project Area designated for lodging is zoned V-.75: Resort-Hotel District under the County of Hawai'i Zoning Code (Figure 1-6), making resort use a compatible and appropriate land use. The</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Today, we live on an increasingly crowded island, and what is done in one area significantly burdens all surrounding areas. The public has cherished this place for many years. Please don't destroy what is so unique and special about this place. Please don't take that from our community. If anything, what we need more of in the Keauhou area is workforce housing that is truly affordable. Using the land for any resort or commercial purpose prevents any such housing from being possible there.</p>		<p>surrounding context, including the Outrigger Kona Resort and Spa, residential condominiums, the Kona Country Club golf course, the Keauhou Shopping Center, vacation rentals, and ocean recreation and tour operators, further reinforces the suitability of the site for a low-impact lodging that complements and supports existing community and visitor-serving uses.</p> <p>The proposed lodging is intentionally designed as low-impact, with a low-profile and low-density layout that is well below the maximum development intensity allowed under current County of Hawai'i zoning. Rather than maximizing building heights, unit counts, or commercial intensity permitted in the V-.75 Resort-Hotel District, the design emphasizes small-scale bungalow-style lodging that integrates with the surrounding cultural landscape.</p>
<p>Please leave the area alone. Keep it natural. Plant native species, create natural paths with benches, remove unnecessary concrete and asphalt. What would Hawaiians of 1800 have wanted?</p>	<p>Mark Barville</p>	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.</p> <p>The DEIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action. Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p>
<p>Please Do Not exploit Keauhou 'āina to extract money. Any more development in that culturally sacred and environmentally fragile and unique place will destroy its remaining qualities. Stop turning the Kona coast into another Kohala coastal resort area or another Waikiki.</p>	<p>Antu Harvey</p>	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.</p> <p>The EIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>We live here full-time. We are being pushed out by all this commercial development to the sole benefit of investors and tourists. We want to save this, one of the few remaining places where we can see and feel connected to our heritage, so our keiki and future generations can see and feel connected to it and at be at peace. I am the Executive Director of Pūlama iā Kona Heritage Council and live in the village of Hōlualoa, very near where the Kealakowa'a road and several holua were still visible until mostly bulldozed during the past 75 years. It breaks my heart that the Keauhou holua was bulldozed for a golf course. Please stop before all is obliterated, leaving only a few photos and interpretive signs.</p> <p>Others have researched and have shared the severe adverse Environmental, Public Safety and Infrastructure impact concerns.</p> <p>We are at a tipping point. It is time we must slow down this destruction of our unique and precious remaining landscapes. Please suspend this project or better yet, reimagine your kuleana regarding its protection and highest use for the health and survival of our 'āina.</p> <p>Mahalo for your time and consideration. ~Antu</p>		<p>Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p> <p>The KBMP is rooted in the principle of mālama 'āina, reflecting Kamehameha Schools' deep commitment to caring for the land through a cultural, environmental, and educational lens. The plan embraces a long-term stewardship approach that prioritizes the protection and revitalization of both natural and cultural resources within the project area. The KBMP focuses on low-impact design, carefully locating future uses to minimize disturbance, preserving sensitive habitats, and protecting culturally significant sites.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p> <p>Environmental stewardship is also expressed through restoration of native vegetation, landscape design, and preservation of natural water features such as springs and anchialine ponds, which support unique ecological systems. Long-term management of these resources is made possible through a sustainable tourism model that uses revenue from low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>
<p>I do not understand why this project is necessary. Why permanently adversely alter the local environment around this sacred site when: (1) your organization owns an existing mall a half mile away, Keauhou Shopping Center, with plenty of space to accommodate the manta tour operators you wish to relocate off Kaleiopapa St; (2) a 350-room hotel already exists on Keauhou Bay (The Outrigger) and it never gets full, and restaurants in it have struggled and closed over the years; and (3) we have a labor shortage on island -</p>	Marjorie Bryant	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Aloha Gas and other businesses at Keauhou Shopping Center like Kenichi Pacific restaurant and KTA grocery and Longs Drugs can't even find enough employees (they are all short-staffed and have cut operating hours and have had constant help wanted signs out for years now and even offer hiring bonuses) - so there isn't anyone to fill the jobs you will create? Are parking lots and new buildings and roads really a fitting way to honor Kamehameha III's birth site?</p> <p>This latter question is a genuine question, not meant to be provocative. It seems to me that there are three problems at Keauhou Bay that your organization is trying to solve, and frankly they aren't all your responsibility to solve. But they all have simpler, less costly and less environmentally detrimental solutions.</p> <p>One problem is: street-based manta tour operators on Kaleiopapa St operate illegally with no overhead and thus have an unfair competitive advantage over legitimate manta tour operators like Sea Quest who are based in bayside buildings on your property. I'd like to make the point that it is the County of Hawaii whose responsibility it is to solve this problem. Doing business on the side of the road has always been prohibited by Hawaii state law, but in the past, it was not commonly enforced. The State of Hawaii, however, now has an explicit law on the books and has begun to expect enforcement: Hawaii Revised Statute 264-101 (2023). The County of Hawaii should be sending enforcement folks down to Kaleiopapa St each night to enforce this law, until the problem goes away.</p> <p>The second problem at Keauhou Bay it seems you are trying to solve: the volume of cars parked on Kaleiopapa St (going on snorkel tours during the day and manta tours at night) cause that busy street (which is gateway to the state boat ramp and The Outrigger Resort) to be unsafe for pedestrians. This safety problem also has a simple solution: the County of Hawaii should make Kaleiopapa St a no parking zone. Keauhou Bay business patrons could then be</p>		<p>hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>To resolve long-standing conflicts between incompatible uses, the KBMP proposes relocating certain commercial operations, particularly those that are currently situated near sensitive cultural sites, to more suitable areas along Kaleiopapa Street. By moving these uses away from the bayfront and heritage zones, the plan protects sacred spaces and allows for cultural practices to thrive without interference.</p> <p>Relocating the existing commercial bayfront tenants at the Keauhou Shopping Center would not meet the objectives of the KBMP. The KBMP identifies five integrated management strategies to guide Kamehameha Schools' stewardship of Keauhou Bay. These strategies are designed to work in unison, forming a comprehensive and interconnected approach that balances cultural, educational, environmental, recreational, and economic objectives. Additionally, the Keauhou Shopping Center was not designed to support ocean recreation activities.</p> <p>The location of the KBMP is ideal for the proposed low-impact lodging and retail uses due to its existing land use designations and surrounding amenities. The Project Area is designated as Urban under the State Land Use District Map (Figure 1-4), which supports resort, retail, and mixed-use developments. The proposed low-impact lodging aligns with this established urban framework and supports the area's planned growth objectives. Additionally, the specific portion of the Project Area designated for lodging is zoned V-.75: Resort-Hotel District under the County of Hawai'i Zoning Code (Figure 1-6), making resort use a compatible and appropriate land use. The surrounding context, including the Outrigger Kona Resort and Spa, residential condominiums, the Kona Country Club golf course, the Keauhou Shopping Center,</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>directed to park in the large grassy area at the corner of Ehukai St and Keleiopapa St, which your organization owns and characterizes as a parking area. And patrons could also be directed to park on Kamehameha III Rd in one of the several dirt parking lots your organization owns over there on the north side of the bay, where many folks already do park, and to park on Kamehameha III Rd itself, which has sidewalks for pedestrians. It seems to me that your organization could charge for these parking privileges in its existing lots and make money.</p> <p>Third problem it seems you are trying to solve is: the buildings you own by the bay (where Sea Quest operates) regularly flood during tsunamis and king tides with high surf. Perhaps all that is necessary to solve this problem is to build a reinforced wall around the structures, to keep the sea out, rather than build brand new structures elsewhere. There may be other problems at the bay you are trying to solve too, and whatever they are, I suggest finding a less environmentally destructive way to solve them, because no one wins when we destroy the one thing we rely on for life: our environment, our land and sea. In any case, it seems to me that these three solutions I suggest are much more cost effective - and less environmentally destructive - than your current proposal. Razing forests and building more parking lots and buildings seems the least cost effective and most destructive and detrimental to everyone's future.</p>		<p>vacation rentals, and ocean recreation and tour operators, further reinforces the suitability of the site for a low-impact lodging that complements and supports existing community and visitor-serving uses.</p> <p>The proposed lodging is intentionally designed as low-impact, with a low-profile and low-density layout that is well below the maximum development intensity allowed under current County of Hawai'i zoning. Rather than maximizing building heights, unit counts, or commercial intensity permitted in the V-.75 Resort-Hotel District, the design emphasizes small-scale bungalow-style lodging that integrates with the surrounding cultural landscape.</p> <p>Increased visitation to Keauhou Bay is anticipated due to improved amenities and the new low-impact lodging. The increased visitor spending in the area, associated with visitors to the new low impact lodging, would improve retail spending in the area and could potentially lead to increased retail occupancy at existing retail spaces. Additional information has been added to Appendix P of the Final EIS on the anticipated economic benefits associated with visitor spending of guests at the proposed low-impact lodging.</p> <p>As part of the planning process for the KBMP, Kamehameha Schools engaged with a wide range of stakeholders and has incorporated community concerns, including firsthand observations about pedestrian safety, traffic congestion, and the impact of incompatible activities at the bayfront.</p> <p>Stakeholders highlighted several pressing issues, notably the absence of sidewalks along Kaleiopapa Street, which forces pedestrians to walk on the roadway alongside vehicle and boat trailer traffic. The limited turnaround space at the end of Kaleiopapa Street further exacerbates congestion. It has also been cited that when cultural ceremonies occur, such as those at the Kauikeaouli birthsite, participants often occupy the roadway, leading to conflicts with vehicular traffic, noise, and a diminished experience for those involved in spiritual or ceremonial observances.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>The KBMP is designed to address these challenges through its comprehensive management strategies. These include the proposed development of pedestrian-oriented infrastructure and improved circulation patterns to enhance safety and efficiency. Importantly, the plan proposes reactivating the historic Old Kona Road as a throughway to better manage traffic flow and redirect it away from sensitive cultural areas.</p> <p>A significant component of the project also includes increasing parking capacity at the existing northern parking lot as well as providing more parking spaces than required at the new commercial center. This will relieve pressure on informal roadside parking. Pedestrian pathways will offer direct, safe access from the parking area to community spaces along the bayfront. Clear signage, well-marked crosswalks, and other visual cues will further support intuitive wayfinding and discourage walking along the roadway.</p> <p>It's important to note that Kaleiopapa Street is owned by the County, not Kamehameha Schools. As such, Kamehameha Schools does not have the authority to enforce parking restrictions or implement pedestrian safety improvements. Kamehameha Schools can only regulate and manage aspects within the boundaries of the Project Area itself.</p> <p>Please refer to EIS Section 3.2.5 for more information on parking and pedestrian circulation.</p> <p>The Project also includes the adaptive reuse of the two historic bayfront buildings for a new cultural education and heritage center.</p> <p>Section 4.7 of the EIS addresses flooding and tsunami inundation. The entire Project Area, including the proposed cultural education and heritage center, lies within the Hawai'i County Civil Defense Agency's designated Tsunami Evacuation Zone. These structures are also situated in a FEMA-designated VE coastal flood zone with velocity hazard. Any improvements or modifications will be subject to applicable building codes and permit requirements, including those related to flood hazard areas.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>New construction and substantial site improvements will require compliance with the County’s floodplain management regulations (Section 27 of the County Code). Therefore, the risk of potential damage from these flood hazards should be minimized by compliance with County requirements.</p> <p>The repurposed cultural education heritage center buildings may be retrofitted to help mitigate storm surge and tsunami risks by applying external coatings to the walls that are impervious to water and providing temporary flood shields at openings and doors. Low flood walls and berms could also be integrated around the buildings that can help divert the storm surge around the buildings. Additional design improvements will be included as required by the County during design and building permit review and approval for the Project.</p>
Parking lots and retail buildings are NOT what Keauhou needs.	Pamela Small	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.</p> <p>The DEIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action. Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p>
The bungalow concept is symptomatic of over-tourism and lack of affordable housing. "People here need authentic, affordable workforce housing. The needs of this community do not include more hotel rooms." Rebecca Villegas, a	Marcie Ide	<p>The Project does not involve the development of new residential housing units. The additional jobs and incomes associated with the Project would contribute to residents’ ability to pay for housing needs. A housing alternative is considered in the EIS however, housing uses would require more parking and infrastructure</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
Hawaii County Council member whose district includes Keauhou Bay.		demands than low-impact lodging uses and would thereby result in increased traffic-related impacts and potentially utility demands. Due to the location and topography, the construction of housing units would be comparatively much more expensive to build, limiting their affordability for local residents in the region. Table 6-1 of the EIS provides a detailed evaluation of the Housing Alternative.
I agree that Commercial Operations should be located away from sensitive areas. I'm not sure what low impact lodging means? If you are creating more lodging for the tourists, it's not going to be low impact. I have doubts that cultural programming will actually be increased. I'm not in agreement with this Management Plan as it looks too big for this precious area	Jon Jokiel	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The proposed lodging is intentionally designed as low-impact, with a low-profile and low-density layout that is well below the maximum development intensity allowed under current County of Hawai'i zoning. Rather than maximizing building heights, unit counts, or commercial intensity permitted in the V-.75 Resort-Hotel District, the design emphasizes small-scale bungalow-style lodging that integrates with the surrounding cultural landscape.</p>
I oppose the proposed developments in Keauhou Bay. The proposal ignores a key fact: our environment is in a delicate state, which means we should be protecting more lands and not developing any lands that we do not have to. The public concerns in Hawaii are also being ignored with this proposal of more development. The public continues to voice	M. Kekoa Aukai-Richardson	The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>opposition to over-tourism, over-fishing, over-development, and pollution, as these are issues that are causing people and animals in Hawaii to have a reduced quality of life. It is especially concerning that this proposal is coming from a Native Hawaiian organization that should by all logic and reason have every interest in seeing this area remain as undeveloped as possible.</p>		<p>maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>Planning for the KBMP involved extensive stakeholder outreach beyond the statutory requirements for Environmental Impact Statements. Kamehameha Schools proactively engaged a wide range of stakeholders, including lineal descendants, cultural practitioners, community organizations, ocean users, nearby residents, commercial operators, educational groups, and government agencies. This approach reflected a commitment to building a management plan grounded in the values and needs of the community and the cultural significance of Keauhou Bay. A full detailing of consultation efforts and input received is provided in Chapter 7 of this document.</p>
<p>It is critical that the EIS and, ultimately, the building project it represents be rejected. Kamehameha Schools claims to be living with Aloha and caring for the 'Aina? A me Ke Kai?? It is preposterous to add 105 hotel rooms with accompanying traffic to this tiny side street.</p>	Kana Leohano	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the proposed project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.</p>
<p>Over the course of 50 years, I've seen many changes on the Big Island – some are positive, but many are not. The land and the ocean are central to all of Hawaii and its communities. They are certainly central to Native Hawaiian identity. But they are also central to all the kamaaina who live here and to visitors like me. I fear that the short-term financial gain that the Kamehameha schools might realize by developing “sustainable, low rise, low-impact lodging on resort zoned upper plateau of Bay” will be offset by the long-term impacts of yet another resort development.</p>	<p>Laurel Terry</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>
<p>On our current trip, we were disappointed to hear about the proposal by Kamehameha Schools to further develop Keauhou Bay. We have always found the Keauhou Bay area to be an important part of the charm of the west side of the Big Island. A project of this magnitude seems certain to strain resources and add to the ever-growing congestion problems. I fear that this project, if approved, will mean we will be looking at years of disruptive construction in an area that is already providing a meaningful experience to locals and visitors alike. If the project would clearly result in an</p>	<p>Howard Warshaw</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
improvement, then perhaps the years of disruption would be worth it.		with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.
Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a serious negative impact in Keauhou Bay.	Adele Henkel	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the proposed project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.</p>
This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.	Adele Henkel	The KBMP is rooted in the principle of mālama 'āina, reflecting Kamehameha Schools' deep commitment to caring for the land through a cultural, environmental, and educational lens. The plan embraces a long-term stewardship approach that prioritizes the protection and revitalization of both natural and cultural resources within the project area. The KBMP focuses on low-impact design,

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>carefully locating future uses to minimize disturbance, preserving sensitive habitats, and protecting culturally significant sites.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p> <p>Environmental stewardship is also expressed through restoration of native vegetation, landscape design, and preservation of natural water features such as springs and anchialine ponds, which support unique ecological systems. Long-term management of these resources is made possible through a sustainable tourism model that uses revenue from low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>
<p>Aloha to all concerned, Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. I was just there a few days ago and saw where it would be. This small bay does not need a new 105 room resort, there is already too many people and traffic. Bringing even more people to this small area will add too big of a burden on the land and bay. This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced. We trust that you will listen to your na'au and do what is pono to protect Keauhou Bay and its surroundings.</p>	<p>Barbara Garcia</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>The proposed lodging is intentionally designed as low-impact, with a low-profile and low-density layout that is well below the maximum development intensity allowed under current County of Hawai'i zoning. Rather than maximizing building heights, unit counts, or commercial intensity permitted in the V-.75 Resort-Hotel District, the design emphasizes small-scale bungalow-style lodging that integrates with the surrounding cultural landscape.</p> <p>Appendix M to the EIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations. The traffic analysis shows that the addition of project-generated traffic would not result in significant roadway operations impacts under typical peak hour conditions. Additionally, the proposed project layout is designed to better separate traffic flows and parking areas to help reduce congestion and reduce delays.</p>
<p>Now, they want to sacrifice one of the most important cultural sites that remain mostly undisturbed on the Big Island- Keauhou Bay. Why? So that tourists will have another beautiful location to stay in.</p>	<p>Ben Rice</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>14. Are you going to be building school facilities in the project area? 15. What will the school facilities consist of? 16. Will there be overnight facilities or camping as part of the school facilities? Please discuss and describe them. 17. Will open fires and imu be allowed in this project area? Please discuss fire roads and availability of fire service 18. What public uses will be displaced by school facilities and/or uses in this project area and at the He'eia Bay property? 24. Where are you filling or dredging or replacing wetlands? 25. What percentage of the wetlands are you filling or dredging or replacing? 26. Where do you intend to replace with new wetlands? 28. How do you intend to protect/avoid disruption of the spring in the upland grading work?</p>	<p>Claudia Rohr</p>	<p>The KBMP does not include the development of new school facilities. As described in Section 3.2 of the EIS, the Proposed Action involves implementing five integrated management strategies focused on cultural, educational, recreational, and commercial uses. Existing bayfront buildings will be repurposed for a new cultural and heritage center, which will support cultural and educational programming aligned with Kamehameha Schools' mission.</p> <p>No public uses will be displaced by the establishment of the heritage center. Current ocean recreation commercial tenants occupy the existing bayfront structures. To resolve conflicts between commercial operations and culturally sensitive areas, the KBMP proposes relocating commercial activities along the bayfront to a more appropriate area along Kaleiopapa Street. These relocated commercial uses will be accommodated in a newly proposed retail center, providing continuity for existing tenants while safeguarding cultural spaces.</p> <p>The KBMP does not include provisions for camping, open fires, or imu. The onsite low-impact lodging is intended to accommodate student groups and other program participants.</p> <p>The Project does not propose any filling, dredging, or replacement of wetlands. However, it includes the restoration of Ho'okūkū Pond, a remnant anchialine pond, to improve ecological conditions and cultural value. Restoration efforts involve clearing accumulated sediments, enhancing subsurface water flow, and expanding the pond area using native landscaping and interpretive features to support native species and traditional practices.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>Section 4.9.2 of the EIS discusses fire protection, emergency medical services, and hospital services. Fire trucks will access the site either via Kamehameha III Road or Kaleiopapa Street. The construction of Old Kona Road, linking Kamehameha III Road and Kaleiopapa Street, provides a crucial alternative evacuation route, significantly enhancing emergency responsiveness and accessibility during fire events.</p> <p>No actions are proposed at He'eia Bay under the KBMP.</p>
<p>This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.</p>	<p>Donna Dufault</p>	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The proposed lodging is intentionally designed as low-impact, with a low-profile and low-density layout that is well below the maximum development intensity allowed under current County of Hawai'i zoning. Rather than maximizing building heights, unit counts, or</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		commercial intensity permitted in the V-.75 Resort-Hotel District, the design emphasizes small-scale bungalow-style lodging that integrates with the surrounding cultural landscape.
It is critical that the EIS and, ultimately, the building project it represents be rejected. Kamehameha Schools claims to be living with Aloha and caring for the 'Aina? A me Ke Kai?? It is preposterous to add 105 hotel rooms with accompanying traffic to this tiny side street. Perhaps even worse is the proposal to cut down a huge number of trees that protect Keauhou Bay by filtering rain running off the land which often includes golf course chemicals.	Kano Leohano	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>The proposed lodging is intentionally designed as low-impact, with a low-profile and low-density layout that is well below the maximum development intensity allowed under current County of Hawai'i zoning. Rather than maximizing building heights, unit counts, or commercial intensity permitted in the V-.75 Resort-Hotel District, the design emphasizes small-scale bungalow-style lodging that integrates with the surrounding cultural landscape.</p> <p>A portion of the Project Area mauka of Old Kona Road will be developed for the low-impact lodging. Currently, this portion of the Project Area above 'Ahu'ula cliff is dominated by invasive Guinea grass and koa haole trees, which provide limited ecological or carbon sequestration benefits. The Project does not propose the removal of native forest. Landscaping improvements throughout the Project Area will include native plant restoration, replacing areas currently dominated by invasive species.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.
<p>All in all, it seems that now is not the right time to place additional burdens on these systems that a new road and new resort area would add. As a visitor who has been staying in the Keauhou Bay/Kam3 area for more than 20 years, I enjoy watching the local volleyball teams practice, the canoes, the families who fish and play in the water - especially on weekends - and the relative lack of development.</p> <p>I hope the County denies the special use permit (and that the KS Trustees reconsider this plan.)</p>	Laurel Terry	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.</p> <p>The DEIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action. Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p>
<p>This is not an appropriate development for this area. While the area should be cared for to bring to life the cultural significance of the area, this development does the opposite. This kind of project can be done by the people no need this fancy project that kills the spirit of this place. Why bring more tourists who will wreckreate in this space? Why not put kānaka back on 'āina to put back what was forcibly removed? Even KS has a history of evictions and wrongful treatment of Native tenants? Why not use your folks resources for be one example, put Hawaiians on the land,</p>	Loke Aloua	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.</p> <p>The DEIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action. Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p> <p>At the heart of the KBMP is the designation of a cultural heritage area that will serve as the piko, or spiritual and cultural center, for</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
bring back the native species? No bring the natives back just for decorate your resort development. Pau dat kine already, nuff. Testimonies received during previous consultations have shown that the community does not support this development. Kamehameha Schools has not listened to the community and instead is plowing forward with their plans for further development for financial revenue. The health of the place is the priority, simple. Does this project enhance or deteriorate the health of the place? I support the No Action Alternative.		<p>cultural and educational activities. This area honors the legacy of Hawaiian royalty and the historical importance of Keauhou Bay, and it is intended to be a gathering place where traditions can be celebrated and passed down. In shifting the bay's focus toward its cultural heritage, the plan aims to reestablish Keauhou as a place of learning, respect, and connection. By making space for Native Hawaiian practices and fostering a welcoming environment for kama'āina, the KBMP creates a foundation for healing, inclusion, and long-term stewardship of the bay.</p> <p>Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Landscaping improvements throughout the Project Area will include native plant restoration, replacing areas currently dominated by invasive species.</p> <p>Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p>
I am opposed to Kamehameha School's EIS regarding development at Keauhou Bay. Development will affect and displace many who presently enjoy and /or make a living at the Bay. This is a fragile ecosystem that is already feeling the impacts of development in the surrounding area. I implore you, PLEASE, do NOT destroy the most beautiful and ALREADY ACCESSIBLE community and cultural resource that we have along the Kona Coastline that supports the needs of our families and visitors alike.	Robert Vatter	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.</p> <p>The EIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action. Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>That Keauhou Bay is so beloved by locals and visitors alike is that it represents a small vision of what Old Hawai'i may have been like, from days long past. It serves a purpose to the community and is a resource we CANNOT do without. Any proposal to develop it will NOT enhance Keauhou Bay, it will destroy it.</p>	<p>Yasmin Vatter</p>	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.</p> <p>The DEIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action. Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p>
<p>Please don't do this. It's a beautiful peaceful quiet bay. Let the ancestors lay in peace</p>	<p>Linda Wilkins-Pierce</p>	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.</p> <p>The DEIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action. Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p>
<p>Keauhou Bay is still worth saving for once destroyed it won't be the same. Aunty Lily Ha'anio Kona who was born here spoke the same, we don't want Waikiki.</p>	<p>Simmy McMichael</p>	<p>Kamehameha Schools understands and respects the desire to keep Keauhou Bay as-is. However, the current state is not viable for a thriving wahi pana.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Keep it special open and respect our lands and let it be.                      For the now and next generation for our Keiki's.</p>		<p>The DEIS considers the No Action Alternative and indicates that it would not meet the purpose and need for the proposed action. Table 6-1 of the EIS provides a detailed evaluation of the No Action Alternative.</p> <p>The KBMP is designed to improve environmental conditions by establishing a model of long-term stewardship that prioritizes the health of the land and ocean. Commercial activities within the project area are designed to support and sustain cultural and environmental preservation efforts. Through responsible planning, relocation of incompatible uses, and a strong emphasis on cultural values, the KBMP directs future activity at Keauhou to contribute to the protection and care of its unique ecosystem and heritage.</p>
<b>Suggestions</b>		
<p>one such idea I propose is creating camping spots and charging for permits on land that is already fit for camping. sites like hipcamp allow you to easily monetize existing spaces to charge guests for camping and making enjoyment of the outdoors available now and for years to come. i implore you to please consider the long term impact of such a selfish decision, not just for the aina, but for the people for generations to come.</p>	Brianna Leever	<p>On-site camping is not included in the Proposed Action. As an alternative to low-impact lodging, camping does not meet the Purpose and Need of the project as defined in Section 2.7 of the EIS. The low-impact lodging component is designed to generate consistent revenue to support long-term management of the Project Area and fund cultural and educational programming. Camping would not provide the financial sustainability required to achieve these goals.</p>
<p>The Plan shows a lack of creativity by proposing more of the "same old" for economic development. The history of KS hotels in Kahalu'u shows two that were ultimately taken down. Building hotels is not without risk. Why not, for example, instead move all boating check-in activities to Keauhou Shopping Center storefronts and bus visitors to the bay (allowing the opportunity for cultural education). This would facilitate construction of cultural venues at the bay, preclude the need for more environmentally damaging development and additional parking along the bay, and increase foot traffic at the under-utilized shopping mall—hence increasing KS revenues from existing infrastructure. It could likely be that this approach has a greater return on</p>	Peter Matlock	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>investment than a risky hotel development. Or, why not take the bold move of seeking to preserve as much land as possible in an undeveloped state, while restoring Native Hawaiian archaeological remains (as is being done in Kahalu'u), so that future generations can learn directly from this historically rich area that once featured seven royal centers?</p>		<p>possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>To resolve long-standing conflicts between incompatible uses, the KBMP proposes relocating certain commercial operations, particularly those that are currently situated near sensitive cultural sites, to more suitable areas along Kaleiopapa Street. By moving these uses away from the bayfront and heritage zones, the plan protects sacred spaces and allows for cultural practices to thrive without interference.</p> <p>Relocating the existing commercial bayfront tenants at the Keauhou Shopping Center would not meet the objectives of the KBMP. The KBMP identifies five integrated management strategies to guide Kamehameha Schools' stewardship of Keauhou Bay. These strategies are designed to work in unison, forming a comprehensive and interconnected approach that balances cultural, educational, environmental, recreational, and economic objectives. Additionally, the Keauhou Shopping Center was not designed to support ocean recreation activities.</p> <p>The location of the KBMP is ideal for the proposed low-impact lodging and retail uses due to its existing land use designations and surrounding amenities. The Project Area is designated as Urban under the State Land Use District Map (Figure 1-4), which supports resort, retail, and mixed-use developments. The proposed low-impact lodging aligns with this established urban framework and supports the area's planned growth objectives. Additionally, the specific portion of the Project Area designated for lodging is zoned V-.75: Resort-Hotel District under the County of Hawai'i Zoning Code (Figure 1-6), making resort use a compatible and appropriate land use. The surrounding context, including the Outrigger Kona Resort and Spa, residential condominiums, the Kona Country Club golf course, the Keauhou Shopping Center, vacation rentals, and ocean recreation and tour operators, further reinforces the suitability of the site for a low-impact lodging that complements and supports existing community and visitor-serving uses.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		The proposed lodging is intentionally designed as low-impact, with a low-profile and low-density layout that is well below the maximum development intensity allowed under current County of Hawai'i zoning. Rather than maximizing building heights, unit counts, or commercial intensity permitted in the V-.75 Resort-Hotel District, the design emphasizes small-scale bungalow-style lodging that integrates with the surrounding cultural landscape.
Security Opening the Old Kona Road to connect the north end of the Bay to the proposed resort could introduce security concerns for your guests. We live down here in the condos off Kamehameha III Rd. At night, some of the people who meet up in the dark north end of the bay are unstable. My family usually avoids the area after dark. Connecting Old Kona Road as a primary entrance to your resort's main parking lot would grant anyone easy access and diminish the security of your property. Keep your Resort property physically cut off from the north end of the bay. I suggest simply creating a turnaround in your resort parking lot that loops into a section of Old Kona road. In addition, if the Holua is restored, another strong and beautiful physical barrier would be created that offers even greater separation. The Holua would cleanly break away the proposed resort from the day use grill and picnic areas in the North. I'm sure your guests will enjoy the added security and seclusion that this plan offers.	Michael Herbert	Limiting access to Old Kona Road exclusively from Kaleiopapa Street does not meet the Purpose and Need outlined in EIS Section 2.7. This configuration would fail to establish a continuous connection between the north and south ends of the bay. The KBMP prioritizes improved vehicular and pedestrian circulation to alleviate congestion, enhance overall connectivity, support emergency evacuation routes, and improve accessibility throughout the Project Area. Full connectivity along Old Kona Road is a key component of achieving these objectives.
I would suggest a 2.3.4 Alternative Action which would address the Heritage area improvements, the parking, boat storage (again for short-term storage only), congestion at the Pier area and repositioning the commercial bayfront activity from the pier area to the corner of Old Government Road and Ehukai St. I think this would provide a much better ROI for the Trust and at the same time accomplish its heritage goals.	Tom Fetter	The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
		<p>plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>An alternative that omits low-impact lodging does not meet the Purpose and Need identified in EIS Section 2.7. The lodging component provides a critical revenue stream to support long-term cultural and educational programming, site stewardship, and maintenance of facilities. Without this element, the KBMP would lack a sustainable funding mechanism necessary to achieve its goals for cultural revitalization, education, and responsible land management.</p> <p>The proposed lodging is intentionally designed as low-impact, with a low-profile and low-density layout that is well below the maximum development intensity allowed under current County of Hawai'i zoning. Rather than maximizing building heights, unit counts, or commercial intensity permitted in the V-.75 Resort-Hotel District, the design emphasizes small-scale bungalow-style lodging that integrates with the surrounding cultural landscape.</p>
<p>As noted in our previous comment letter, we strongly believe the impact area analyzed should be expanded to include the intersections of Ali'i Drive at Keauhou Shopping Center Access, Kamehameha III Road at the Keauhou Shopping Center access, and Kamehameha III Road at Kuakini Highway at the very least. These are intersections where volumes are higher and the impact of a the project-generate traffic volume increases will have a larger impact</p>	David Markley	<p>Appendix M to the DEIS includes a detailed mobility analysis report that analyzes the project's potential impacts to traffic operations.</p> <p>The study locations were selected based on the number of trips added to each turning movement at the intersections in the vicinity of the project site. The potential impact of traffic added to the requested intersections is expected to be less than significant during the study peak hours based on typical traffic operations.</p>
<p>Aloha, thank you for the opportunity to provide comments on the subject EISPN for the Keauhou Bay Management Plan. The Clean Air Branch would like to make the following comments on the subject DEA:</p> <p>For construction and other activities associated with the project, the applicable provisions of Hawaii Administrative</p>	State Department of Health, Clean Air Branch	<p>Kamehameha Schools appreciates the feedback provided by the Clean Air Branch.</p> <p>Kamehameha Schools will follow the applicable provisions of Hawaii Administrative Rules §11-60.1-33 to mitigate fugitive dust impacts throughout the project. To mitigate potential impacts to air</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
Rules §11-60.1-33 shall be followed to mitigate fugitive dust impacts. Also, please see our standard comments at: <a href="https://health.hawaii.gov/cab/files/2022/05/Standard-Comments-for-Land-Use-Reviews-Clean-Air-Branch-2022-1.pdf">https://health.hawaii.gov/cab/files/2022/05/Standard-Comments-for-Land-Use-Reviews-Clean-Air-Branch-2022-1.pdf</a> Please let me know if you have any questions or concerns.		quality during construction, a dust control management plan will be prepared, and Best Management Practices will be implemented.
There is a better, less risky alternative for social, economic, learning and career goals Good paying jobs of the future will build on Hawaiian heritage, not by making the past an object for tourists to consume, but by re-imagining how the wisdom and technologies of the ancestors can inform and be informed by today's technologies and today's people. That goal can be met by focusing development of the targeted mauka space on the fourth of five primary KS management strategies: Maintain and Establish New Place-based Cultural Education Areas. Cultural Education is about looking forward as well as back. It is about honoring today's workers, not just yesterday's royalty - having an accessible place for kupuna to share their history, kanaka to share work and play experience, and keiki to begin writing the next chapter of shared history. It is recognizing that play and sports have long been part of Hawaiian culture. They are effective, evidence-based means of education as well as entertainment. The proposed alternative plan for this location would maintain several acres of vegetation up mauka, as a barrier to golf course runoff. The remaining acres would become a state of the art Play and Learn Center, with no-tech, low-tech and high-tech options. Operations would be funded by a combination of tiered, pay-to-play fees that favor local families with generational ties, then kama'aina, then visitors. It could include paid sponsorship of some spaces, with limited advertising; and grant funding for continuing innovation. No tech: Demand focused, small footprint, shaded • Sports courts for Volleyball, Pickleball, Ulu Maika (rolling stone disks) • Picnic areas with tables and large barbecue grills, shaded viewing benches Low tech: Leveraging ubiquitous smart phones and	Alice Ray	<p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>An alternative that omits low-impact lodging does not meet the Purpose and Need identified in EIS Section 2.7. The lodging component provides a critical revenue stream to support long-term cultural and educational programming, site stewardship, and maintenance of facilities. Without this element, the KBMP would lack a sustainable funding mechanism necessary to achieve its goals for cultural revitalization, education, and responsible land management.</p> <p>The proposed lodging is intentionally designed as low-impact, with a low-profile and low-density layout that is well below the maximum development intensity allowed under current County of Hawai'i zoning. Rather than maximizing building heights, unit counts, or commercial intensity permitted in the V-.75 Resort-Hotel District,</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>basic GPT • Distributed, educational, outdoor posts with posters about the ‘aina, plants, sea, sky, with QR codes to extend learning via video on personal phones • Learn by Doing huts: Talk Story (oral history), Learn Hula, Learn ‘Oleleo. Huts, made with traditional materials; personalized experiences delivered through AI • Telescopes: One for moon and sea, one for deep sky, one for wheelchair access High tech: AI to increase empathy, place-based identity and malama ‘aina, malama kai • Facelt©: Transform your race, gender, even species by degrees, to see at what point you become other, and/or they become you. • FishIt©: Use your mind and muscle to land a big marlin, without the cost of the boat • FindIt©: Bird and bug watchers’ treasure hunt • HoldOnHolua©: VR toboggan ride down the side of this very mountain • ChoosingHawaii: Videogame of choices and consequences to sustain Hawaii island Instead of more new buildings for affluent tourists, with 150+ more toilets, and even more cars above Keauhou Bay, this alternative would conserve land, cost just 10% of the \$125 million project budget, and provide a reasonable financial return of 8% above operating costs after three years. That would leave \$100 million to invest in the affordable housing desperately needed by working families and kupuna, and provide construction jobs in the process.</p>		<p>the design emphasizes small-scale bungalow-style lodging that integrates with the surrounding cultural landscape.</p>
<p>We recommend coordination with the county to incorporate this project into the country's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.</p> <p>We recommend that water efficient fixtures be installed and water efficient practices implemented throughout the development to reduce the increased demand on the area's freshwater resources. Reducing the water usage of a home or building may earn credit towards Leadership in Energy and Environmental Design (LEED) certification. More information on LEED certification is available at <a href="http://www.usgbc.org/leed">http://www.usgbc.org/leed</a>. A listing of fixtures certified by</p>	<p>Dean Uyeno                      (DLNR,                      Commission on                      Water Resource                      Management)</p>	<p>Kamehameha Schools appreciates the feedback and recommendations provided regarding water use, efficiency, and environmental management in the development of the Project.</p> <p>Kamehameha Schools will continue coordination with the county to incorporate this KBMP into the country's Water Use and Development Plan.</p> <p>Water conservation measures are discussed in Section 4.12.1 of the EIS. Water conservation measures will be implemented in design of the Project and may include, but not be limited to, the following: efficient irrigation systems such a drip system and moisture sensors, utilization of non-potable water for irrigation, drought tolerant plants, and the use of Water Sense-labeled ultra-</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>the EAP as having high water efficiency can be found at <a href="http://www.epa.gov/watersense">http://www.epa.gov/watersense</a></p> <p>We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. Stormwater management BMPs may earn credit toward LEED certification. More information on stormwater BMPs can be found at <a href="http://planning.hawaii.gov/czm/initiatives/low-impact-development/">http://planning.hawaii.gov/czm/initiatives/low-impact-development/</a></p> <p>We recommend the use alternative water sources, wherever practicable.</p> <p>We recommend participating in the Hawaii Green Business Program, that assists and recognizes businesses that strive to operate in an environmentally and socially responsible manner. The program description can be found online.</p> <p>We recommend adopting landscape irrigation conservation best management practices endorsed by the Landscape Industry Council of Hawaii. These practices can be found online at <a href="http://www.hawaiiscape.com/wp-content/uploads/2013/04/LICH_Irrigation_Conservation_BMPs.pdf">http://www.hawaiiscape.com/wp-content/uploads/2013/04/LICH_Irrigation_Conservation_BMPs.pdf</a></p> <p>There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.</p>		<p>low flow water fixtures and toilets. County DWS will continue to be consulted as the Project design progresses. Final construction drawings will be reviewed and approved by DWS and HFD.</p> <p>The project's stormwater management plan and Best Management Practices (BMPs) are designed to safeguard Keauhou Bay's water quality and marine resources both during and after development. EIS Section 4.5 discusses Project stormwater management and drainage improvements. The Project proposes a comprehensive stormwater management system designed to capture and treat stormwater runoff on-site. This infrastructure will significantly reduce pollutants reaching the ocean, helping to maintain and enhance water quality in Keauhou Bay.</p> <p>The KBMP does not include activities that are anticipated to result in ground or surface water degradation. However, Kamehameha Schools will comply with all applicable State Department of Health requirements related to water quality. Project implementation, including site work and any water-related improvements, will be subject to required permits and regulatory reviews. Any conditions imposed by the State Department of Health to protect water resources will be addressed as part of project approvals.</p>
<p>We do have the following specific questions; although, they are not raised by the EIS. The KCC KBMP Working Group Committee would be very grateful for an opportunity to meet with KS to discuss the following questions and others that may arise. 1) Are there ways in which KCC might more actively promote the KBMP goals in closer cooperation with</p>	<p>Carolyn Leilani Carter</p>	<p>Kamehameha Schools welcomes exploring opportunities for further collaboration with KCC in promoting the KBMP's goals.</p> <p>The Project is not anticipated to impact Keauhou KCC access to Keauhou Bay or existing operations. Over the long term, planned improvements to parking, vehicular and pedestrian circulation, and</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>KS? 2) How will increased tourist activity and reconfiguration of KCC's footprint affect KCC's access to the bay? 3) How will the KBMP affect race practices, other training, canoe races, and use of the imu for club gatherings and pā`ina? 4) Operational Matters a) Will the KCC halau remain where it is, or will it have to be moved? b) Will KCC be required to construct a "compliant" halau structure? c) Will KCC have access to a secure place on site to store and repair canoes?</p>		<p>maintenance of shared facilities are expected to enhance overall access to the bay for KCC and other users. The KBMP supports continued community use while addressing circulation and congestion challenges within the Project Area.</p> <p>Specific operational matters will be resolved during future lease negotiations.</p>
<p>The most appropriate proposed action would remove the stuck-through language from the five Management Strategies.</p> <p>"Specific planning strategies and key targeted actions were developed that ultimately provided the decision-making framework that guided the completion of the KBMP. The KBMP is organized into five (5) primary Management Strategies as presented below:</p> <ol style="list-style-type: none"> <li>1. Establish a Heritage Management Corridor • Relocate existing commercial activities fronting the birth site and repurpose existing facilities for cultural and educational activities. • Protect cultural lines of sight and view planes from the birth site area and 'Ahu'ula Cliff. • Continue a walking path to extend from the current birth site area towards Mo'ikeha Cave. • Maintain a buffer and open space corridor within the alignment of Kaneaka Hōlua path.</li> <li>2. Reposition and Development of New Commercial Bayfront Areas &amp; Appropriate Density Resort Area • Develop several low-rise buildings to encompass a total of approximately 14,000 SF retail/dining space to accommodate the relocation of commercial operators from the bay front area, possible complementary retail uses, and potentially allow space for existing ocean recreation operators who currently do not have a physical presence or 6 official check-in location at the bay. ➤ Address the opportunity gap within Kona's existing visitor</li> </ol>	<p>Sierra Club (Moku Loa Hawaii Island Group)</p>	<p>Kamehameha Schools appreciates the input provided regarding the proposed action and the KBMP.</p> <p>The Purpose and Need set forth in Section 2.7 of the EIS indicates a need to strategically reorient and establish new opportunities for place-based cultural educational programming; create passive and active recreational activities; manage circulation and parking; define appropriate commercial and resort-zoned uses; generate revenue that will go back into the long-term operations and maintenance of Keauhou Bay and as well as any excess revenue to support the general mission of Kamehameha Schools. The Project meets this need by providing an opportunity to redefine notions of hospitality, placekeeping, and placemaking in harmonious balance with ensuring all associated improvement costs as a result of this plan's implementation can be self-sustaining. Long-term management of the bay's natural and cultural resources is made possible through a sustainable tourism model that uses revenue from the low-impact lodging and commercial operations to fund ongoing stewardship, maintenance, and educational programming.</p> <p>An alternative that omits low-impact lodging does not meet the Purpose and Need identified in EIS Section 2.7. The lodging component provides a critical revenue stream to support long-term cultural and educational programming, site stewardship, and maintenance of facilities. Without this element, the KBMP would lack a sustainable funding mechanism necessary to achieve its goals for cultural revitalization, education, and responsible land management.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p><del>accommodation inventory through the provision of an appropriately defined density for a low impact lodging on the upper mauka plateau of 'Ahu'ula Cliff.</del></p> <p>3. Reorient Recreational and Community Use • Reorient the area of use by the Keauhou Canoe Club to re-organize the extent of formal and informal recreational uses of the area. • Establish a new 200-foot-wide open space corridor running mauka-makai from the Old Kona Road and upper 'Ahu'ula Cliff overhang to the beach front. • Expand the Ka'ili'ilinehe Beach Park to connect to the mauka-makai corridor. • Provide improved parking for recreational users north of Kamehameha III Road. • Maintain passive open space along the top of the 'Ahu'ula Cliff plateau by establishing a pedestrian promenade along the Old Kona Road. • Establish a future community use area adjacent to Keauhou Canoe Club. • Improve shoreline access for cultural and recreational activities. • Create a greater sense of inclusivity at the bayfront.</p> <p>4. Maintain Existing and Establish New Place-Based Cultural Educational Areas • Repurpose the existing buildings adjacent to the birth site area to become a part of a cultural learning center and heritage center.                      Keauhou Bay Management Plan Draft Environmental Impact Statement 1-15</p> <p>5. Manage Vehicle, Boat and Pedestrian Circulation Through the Bayfront Village • Provide improved parking areas for recreational users, local residents, and area visitors with clear points of access. • Revitalize Old Kona Road to relieve congestion at the bayfront and provide a north-south connection. • Seek to collaborate with State Department of Land and Natural Resources (DLNR) Division of Boating and Ocean Recreation (DOBOR) to consider additional boat-trailer parking during active use. • Consider an agreement with DOBOR and Hawai'i County to manage vehicle loading and unloading</p>		

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>activities at the pier and adjacent facilities. • Create new wayfinding throughout the area, inclusive of landscaping, signage, reflection points and an entry feature.</p> <p>All five Management Strategies must operate in tandem for the KBMP to be holistically successful. Accordingly, the Proposed Action is defined as the implementation of the five Management Strategies at Keauhou Bay."</p>		
<p>Also mentioned was Blue Carbon, which is on the financial market to sustain projects of restoration. I mentioned to KS with all their coastal access through their land holdings Blue Carbon could make these types of projects feasible using their school to educate with restoration projects along our coastal waters using carbon credits. 83% recycle of carbon is in our oceans. Other examples I touched on were Maui aquarium which has the seeding ability for Keauhou Bay and Waikiki aquarium has also pioneered efforts to cultivate coral and have shipped over 5,000 corals grown in Hawaii. We just recently welcomed a new coral restoration project at Otec. NOAA and volunteers have projects in Kane'ohē Bay, Mauna Loa Bay and South shore waters. Besides NOAA and many other state and federal programs to pool resources with KS, I know this can be done. Puerto Rico collected 10,000 pieces of broken coral and replanted with a 90% success rate after their 2017 hurricane.</p>	Jan Brinkman	<p>Although Kamehameha Schools does not have jurisdiction to manage lands in ocean waters, there are opportunities for the Project to support marine conservation through place-based educational programming. Project facilities could host visiting researchers and support student engagement through hands-on learning experiences, cultural education, and direct involvement in conservation initiatives. Additionally Kamehameha Schools is open to exploring partnerships with other marine conservation organizations to steward coastal resources.</p>
<b>Support</b>		
<p>Very Supportive of this project! Believe this is the best use of land to provide resources for protecting historical landmarks and the Bay Area. Would rather see this type of development than more homes for high wealth families who are not local to the island. We need to preserve and continually educate the tourists and local residents who use this great asset.</p>	Claude Acoba	<p>Mahalo for your support of the KBMP.</p>
<p>At this time, I have been pleased with Kamehameha Schools' (KS) emphasis on community engagement throughout this process, including with my Senate office, to</p>	Dru Mamo Kanuha	<p>Community and stakeholder outreach has been integral to the KBMP since planning began in 2016. Kamehameha Schools engaged lineal descendants, cultural practitioners, residents,</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
ensure that all community members have a chance to provide their mana'o on the impacts of KS' plans for the future.		commercial operators, and agencies to identify key issues and guide land use decisions. Feedback from this outreach shaped the KBMP's focus on cultural preservation, reduced user conflicts, and enhanced educational and recreational opportunities. Kamehameha Schools welcomes the opportunity for continued dialogue with your office.
Upon my thorough review and analysis of the Draft EIS and supporting documents, a very well informative and complete document covering (no doubt) a wide variety of 'sensitive' // 'concerning' areas of interest. Clearly, the documents demonstrate a high level of awareness and mitigation measures, that realistically reassures the public that KS has a great development in the best interest for Kona.  Therefore, it's my opinion that this is a worthy project endeavor that has my full support and endorsement.	Rob Bussel	Mahalo for your support of the KBMP.
I support Kamehameha Schools (KS) comprehensive plan to improve Keauhou Bay. This sacred and historical place has been sorely neglected for too many years. Too many Hawaiian historic and sacred lands have vanished due to poor management and limited forethought. KS's Keauhou plan is almost a decade in the making and hasn't been without community and stakeholder input. For those that have read the plan will understand this project is meticulously detailed to honor the legacy of Kauikeaouli and the future of the Kānaka 'Ōiwi.  The plan itself is based in stewardship and education. The plan highlights Kauikeaouli's birth site and utilizing current commercial buildings to increase cultural education. The restoration of Ho'okūkū Pond, Mo'ikeha Cave, and removal of invasive plants and reseeding only native plants should be commended by all. Additionally, rerouting and relocating commercial activities away from sensitive cultural sites will create a more harmonious and balanced use of the area.	Shelley Carey	Mahalo for your support of the KBMP.

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Due to current limited infrastructure, there are limited community and recreational opportunities, the new plan will increase use of the shoreline, improve parking, and route vehicle traffic to the old Kona Rd. Additionally, an increase of revenue from low impact lodging and commercial center will further increase the KS educational mission. The KS Keauhou Bay Plan should be approved without reservation.</p>		
<p>My name is Dale Fergerstrom and I am in favor of Kamehameha Schools Management Plan for its lands surrounding Keauhou Bay in Kona. I was born in Laupahoehoe Hawai'i island in 1952 and have lived my whole life on this island. I am a retired police officer with the Hawai'i County Police Department with my last assignment being the District Commander for Kona.</p> <p>I am heavily involved in perpetuating the traditions and practices of the Traditional Hawaiian Canoe and visit Keauhou Bay on a regular basis for the past 23 years. I am pleased with Kamehameha Schools effort to bring some order to the commercial over-exploitation of Keauhou by setting forth a plan that will move a significant amount of this commercial activity away from the head of the bay and away from the Birth Site of Ali'i Kauikeaouli (Kamehameha III). This move will bring some dignity back to this important Historical site.</p> <p>I would like to note that some of the behavior of visitors in and around this birth site would not be tolerated by the community or the government if it were to take place at the Lincoln Memorial or the Birth Site of any of the past American Presidents.</p> <p>And while this plan calling for the construction of a modest hotel on the upper sections of Kamehameha School lands mauka of the bay seems to contradict the premise of reducing commercial congestion and has raised concern in the community, it must be remembered that this whole infrastructure fix is being paid for solely by Kamehameha</p>	Dale Fergerstrom	Mahalo for your support of the KBMP.

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Schools. Kamehameha Schools will receive no financial or other help from anyone in creating or maintaining the infrastructure being proposed here. Unlike Government, KS must be able to make this endeavor self-supporting.</p> <p>And no one has pointed out that much of the commercial congestion of Keauhou Bay has been caused by the State of Hawai'i. The State's mismanagement of commercial ocean permits for this bay has played a significant role in the problems facing Keauhou and they have not been caused by Kamehameha Schools or any of its programs.</p> <p>In addition Kamehameha Schools, in this plan, is trying to bring some relief to the congestion of private small boat fishermen who are forced to use Keauhou bay because of the shutting down the Kailua Pier Boat ramp to private boat owners after the 9-11 attack on New Your City 13 years ago. The State has known full well the pressure this closure has placed on Keauhou Bay and has done little to address it.</p> <p>Again Kamehameha schools is attempting to address problems significantly caused by Government Mismanagement of this resource while receiving no financial assistance from anyone. I also feel that Kamehameha Schools commitment to the concept of "Aloha 'Aina" will ensure it will work diligently to address any environmental issues not addressed in the Environmental Impact Statement should they arise. And if they don't you can be assured that Hawaiians will hold KS accountable as We have done in the not too distant past.</p>		
<p>I have reviewed the Keauhou Bay Management Plan and want to provide my input and support in favor of it moving forward.</p> <p>I am a resident and descendant of the Nahale Ohana, who's roots emanate from Kahaluu N. Kona. I have seen the pristine beaches and ocean accessibility disappear over my lifetime, due to commercial, luxury residential and resort</p>	Charles Nahale	Mahalo for your support of the KBMP.

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>development. The significance and history of Kahaluu, Keauhou and surrounding lands have been ignored, destroyed and pilfered as a result of lack of respect and greed of quick development and profitable exit. The once abundant ocean resources and access, which afforded a subsistence lifestyle for our Kamaaina is no longer a viable means to support a growing family. We must look at alternatives ways to maintain and support our families,</p> <p>We still have a responsibility to malama and restore our heritage, culture, history, and access of this Aina, in perpetuity.</p> <p>The Keauhou Bay Management Plan addresses these issues regarding restoring access, creating public access and facility use, consolidating commercial facilities, restoring significant historical and critical habitat, providing education and collaborative development and stewardship. This is an opportunity for our community to see a development that is perpetuating the historical preservation of Keauhou bay, its surrounding lands, its culture and inclusion of our Opio's.</p> <p>I am in support of this project</p>		
<p>I admire the insight to move the commercial activities out of the bay and over to a new section to ease both the traffic, while enhancing the historic and cultural value of the deep Hawaiian Culture that has long been missing in the bay over time. To bring these historic sites, such as the Holua Slide, the Kamehameha Birthplace marker and Mo`ikeha Cave, and Ka`Ili`ilinehe Park as preserved points of interest is much needed. These treasured places must be saved and revered. I fully support the efforts that Kamehameha Schools is taking in this very well thought out plan for Keauhou Bay and see how it will only enhance safety, pleasure, and understanding of its cultural significance for both residents and visitors to the area.</p>	Nancy Sakamoto	Mahalo for your support of the KBMP.

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
I appreciate Kamehameha Schools (KS) for maintaining its awareness of what makes Keauhou Bay and the surrounding lands and coastal resources so special in all the world, and commend KS for its willingness to envision a development of lower-density than it could build (e.g., a 700-room hotel or resort)	Aaron Chang	The proposed lodging is intentionally designed as low-impact, with a low-profile and low-density layout that is well below the maximum development intensity allowed under current County of Hawai'i zoning. Rather than maximizing building heights, unit counts, or commercial intensity permitted in the V-75 Resort-Hotel District, the design emphasizes small-scale bungalow-style lodging that integrates with the surrounding cultural landscape.
I applaud most of the proposed development activities in the Keauhou Bay Management Plan to "reorient commercial activities away from culturally sensitive areas to alleviate congestion and establish a new place-based cultural educational center."  I support this opportunity to develop a scenic and open space heritage corridor that protects habitats, maintains biodiversity, and promotes outdoor recreation with trails, picnic tables and bathrooms. · Restore the cultural landscape with physical features, trees, pathways, and pavilions, that express the historical significance of his birthplace. · Restore the Old Kona Road and Keauhou Trail to provide access mainly for pedestrians, bicycles, the handicapped and parking.	Marcie Ide	The KBMP identifies five integrated management strategies to guide Kamehameha Schools' stewardship of Keauhou Bay. These strategies are designed to work in unison, forming a comprehensive and interconnected approach that balances cultural, educational, environmental, recreational, and economic objectives.
I support the needed upgrades for public use and cultural preservation + education.	Shantee Brown	The KBMP identifies five integrated management strategies to guide Kamehameha Schools' stewardship of Keauhou Bay. These strategies are designed to work in unison, forming a comprehensive and interconnected approach that balances cultural, educational, environmental, recreational, and economic objectives.
KCC supports the KBMP Proposed Action as it relates to the "long-term operations and maintenance of Keauhou Bay", the "opportunity to support and revitalize cultural events and traditional practices", and to "preserve and support a range of passive and active recreational activities" (DEIS 2.7 at 2-11), including specifically outrigger canoe paddling and racing	Carolyn Leilani Carter	The KBMP identifies five integrated management strategies to guide Kamehameha Schools' stewardship of Keauhou Bay. These strategies are designed to work in unison, forming a comprehensive and interconnected approach that balances cultural, educational, environmental, recreational, and economic objectives.

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>Aloha, I am writing to express my support for the Keauhou Bay Management Plan and the draft EIS. I have been scuba diving at Keauhou since I logged my first manta ray night dive on August 13, 1985. In the intervening 38 years, and over 14,500 logged scuba dives, I've seen very few improvements to the infrastructure surrounding the bay despite a giant increase in the recreational and commercial use of the bay. I have been fortunate to see the Kamehameha presentation of their proposed plans to improve the shore facilities twice. They display a commitment to improving the area culturally, structurally, recreationally and commercially. I think they seem to have a good plan to greatly improve the land around Keauhou Bay for the community, the environment and Kamehameha schools. Please advance the proposed improvements to Keauhou Bay. Thank you. Sincerely Keller Laros Chair Manta Pacific Research Foundation</p>	<p>Keller Laros</p>	<p>Mahalo for your support of the KBMP.</p>
<p>Failing to permit Kamehameha Schools (KS) to provide leadership on this development also may ultimately prove a disservice to the Keauhou Bay community. The leadership of Kamehameha Schools has resulted in a resort with lower density rather than a high rise development with double the number of rooms and visitors, as permitted by County planning. KS theoretically could sell the property to another developer that may not hold community interests as high as KS. This reason alone is reason to Support the EIS and the KS Resort Development. Since KS corporate goals are multifaceted there is not the sole goal of financial gain as most developers would hold. KS goals include promote goodwill in the community, education of the public, and encouraging local residents to have pride in their community and history. I have witnessed first hand, very good leadership decisions made by KS as demonstrated in their resort development plan's low density housing, this EIS in mitigating impacts on the health of the bay, their holding so</p>	<p>G Hand</p>	<p>Mahalo for your support of the KBMP.</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
<p>many community hearings and meetings with stakeholders at the bay in developing their plan for the area.</p> <p>This is also not only a resort development plan but also a major change and improvements for the area in adding badly needed infrastructure (streets and traffic flow) to handle existing traffic and to ease congestion. The success of the resort development is part of the funding for the improvements that will benefit the entire local community who utilize the Keauhou Bay for business, leisure and residents. Having worked in this area for many years, the congestion continues to grow and there is no end in sight, except for the resort development and redevelopment of the waterfront and roads by KS. In Conclusion: Please support the EIS, KS Resort Development, and redevelopment plans for Keauhou Bay. It's important to be practical and accepting the fact that to build the roads and infrastructure at Keauhou Bay there needs to be a plan that will generate sufficient income to pay for the infrastructure. This is a good blend of low density housing, infrastructure and street improvements paid by income from the KS resort development. As far as I know, money doesn't grow on trees and the roads we need to reduce congestion at Keauhou Bay can be funded through this resort development. Let's get behind this plan and see the vacant land behind the bay developed into a beautiful resort that enhances the Keauhou Bay overall and helps improve everyone's experience visiting the bay with better roads and traffic flow.</p>		
<b>Figure Resolution</b>		
<p>I have been able to download the KBMP_DEIS volumes I and II, but the EISPN will not download (it hangs up after just ~ 140kb of the 6+ mb file. Two of the images:  <a href="https://www.ksbe.edu/assets/pdfs/KB_Mgmt_Plan_Brochure_2024-05-16.pdf">https://www.ksbe.edu/assets/pdfs/KB_Mgmt_Plan_Brochure_2024-05-16.pdf</a> and Keauhou Bay Management Plan Detail Concepts 2021, are of such low resolution that they can't be read when</p>	<p>Jim Lisy</p>	<p>All official KBMP EIS documents are available for download through the State of Hawai'i Environmental Review Program (ERP) website. These documents, including all volumes of the EIS and relevant figures, are accessible in complete and legible format.</p> <p>Figures referenced in the KBMP are embedded within the official EIS and are presented at sufficient resolution to support effective public review. Specific figures such as Figure 3-1 (Existing</p>

Summary of Draft EIS Comments and Responses		
Comments	Commenter	Responses
expanded. Could you please correct these problems so that one can effectively comment on the EISPN and view the supporting images?		<p>Conditions), Figure 3-34 (Keauhou Bay Management Plan), and Figure 3-35 (Conceptual Improvement Plan) provide key visual context for the Proposed Action.</p> <p>If there are continued difficulties with downloading or viewing these documents online, hard copies are available for review at the Kailua-Kona Public Library, Kamehameha Schools' Keauhou Office, and the Hawai'i State Library.</p>
<b>No Comment</b>		
<p>This is in response to your letter dated June 24, 2024. In that letter, you provided interested parties a 45-day notice to submit any comments regarding the Draft Environmental Impact Statement for the Kamehameha Schools Keauhou Bay Management Plan.</p> <p>Staff has reviewed the application and has no comments or objections to offer at this time.</p>	<p>Thomas Shopay                      (County of Hawai'i, Police Department)</p>	<p>We acknowledge that the Hawai'i Police Department has not comments at this time. Kamehameha Schools looks forward to ongoing collaboration as the project moves forward.</p>

Appendix D

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# **DEIS Original Comments**



**Federal**





## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Pacific Islands Fish and Wildlife Office  
300 Ala Moana Boulevard, Room 3-122  
Honolulu, Hawaii 96850



August 6, 2024

Kawika McKeague

2

Listed species in accordance with section 7 of the ESA. Our data indicate the following species may occur or transit through the vicinity of the proposed project area:

- 'Ope'ape'a or Hawaiian hoary bat (*Lasiurus cinereus semotis*),
- Nēnē or Hawaiian goose (*Branta sandvicensis*),
- Hawaiian waterbirds, including ae'o or Hawaiian stilt (*Himantopus mexicanus knudseni*), 'alae ke'oke'o or Hawaiian coot (*Fulica alai*), and koloa maoli or Hawaiian duck (*Anas wyvilliana*),
- Hawaiian seabirds, including Hawai'i Distinct Population Segment of the 'akē'akē or band-rumped storm-petrel (*Hydrobates castro*), 'ā'o or Newell's shearwater (*Puffinus newelli*), and 'ua'u or Hawaiian petrel (*Pterodroma sandvichensis*),
- Sea turtles, including the Honu or green sea turtle (*Chelonia mydas*) and the honu'ea or Hawksbill sea turtle (*Eretmochelys imbricata*), and
- Blackburn's sphinx moth (*Manduca blackburni*).

A biological survey conducted by AECOS in 2021 did not record any federally listed plants, birds, or mammals in the proposed project area, however; we recommend that the project implement the U.S. Fish and Wildlife Service (Service) Avoidance and Minimization Measures provided below to avoid impacts to federally listed species. We have attached additional recommendations for Invasive Species Biosecurity Protocols (Attachment A) and Best Management Practices For Work In or Around Aquatic Environments (Attachment B).

'Ope'ape'a

The Hawaiian hoary bat roosts in woody vegetation across all islands and will leave their young unattended in trees and shrubs when they forage. If trees or shrubs 15 feet or taller are cleared during the pupping season, June 1 through September 15, there is a risk that young bats could inadvertently be harmed or killed, since they are too young to fly or move away from disturbance. Hawaiian hoary bats forage for insects from as low as 3 feet to higher than 500 feet above the ground and can become entangled in barbed wire used for fencing.

In the DEIS, it stated that a qualified biologist would survey any trees taller than 15 ft during the bat breeding season prior to any disturbance to the tree. The Service does not recommend this method as roosting bats and pups are difficult to detect; therefore, woody plants should not be disturbed, removed, or trimmed during the bat birthing and pup rearing season.

To avoid and minimize impacts to the endangered Hawaiian hoary bat we recommend you incorporate the following applicable measures into your project description:

- Do not disturb, remove, or trim woody plants greater than 15 feet tall during the bat birthing and pup rearing season (June 1 through September 15).
- Do not use barbed wire for fencing.

Nēnē

Nēnē are observed in a variety of habitats, but prefer open areas, such as pastures, golf courses, wetlands, natural grasslands and shrublands, and lava flows. Nēnē presence is unlikely at the

Subject: Comments on the Draft Environmental Impact Statement for the Kamehameha Schools Keaouhou Bay Management Plan, Keaouhou, Hawai'i Island, Hawai'i

Dear Kawika McKeague,

Thank you for your June 23, 2024, letter requesting technical assistance for the Draft Environmental Impact Statement (DEIS) for the Kamehameha Schools Keaouhou Bay Management Plan in Keaouhou, Hawai'i. The Project encompasses Kamehameha Schools owned lands along Keaouhou Bay totaling approximately 29 acres in size and presently identified by Tax Map Key (TMK) numbers: (3)-7-8-012:098; (3)-7-8-012:101; (3)-7-8-012:048; (3)-7-8-010:044; (3)-7-8-012:027; (3)-7-8-012:004; (3)-7-8-012:013; (3)-7-8-012:014; (3)-7-8-012:054; (3)-7-8-012:061; (3)-7-8-012:065; (3)-7-8-012:007; (3)-7-8-010:049; and (3)-7-8-012:103. The site is also located within the Special Management Area. Kamehameha Schools proposes to implement the Keaouhou Bay Management Plan, which includes establishing a heritage management corridor, developing new commercial areas and retail areas, developing a resort area with lodging, and consolidating and reorienting recreational and community use areas. The project is expected to start between 2025 and 2026 and will be implemented in phases. Some project actions will occur in the near term (2-5 years) while others will be mid-term (5-10 years) and longer-term (>10 years).

Our letter has been prepared under the authority of and in accordance with provisions of the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*), as amended (ESA). We have reviewed the information you provided and pertinent information in our files, as it pertains to federally

### PACIFIC REGION 1

IDAHO, OREGON\*, WASHINGTON,  
AMERICAN SÁMOA, GUAM, HAWAII, NORTHERN MARIANA ISLANDS  
\*PARTIAL

project site but nēnē may occasionally loaf or be attracted to areas during construction activities, especially if clearings are made or standing water is created. Nēnē are vulnerable to vehicular strikes, human presence, and construction activities because nēnē enter roadways, and foot traffic and equipment can crush nests hidden in vegetation. Human presence and disturbance can keep adults from protecting and provisioning vulnerable young in nests.

To avoid and minimize potential project impacts to nēnē we recommend you incorporate the following measures into your project description:

- Do not approach, feed, or disturb nēnē.
- If nēnē are observed loafing or foraging within the project area during the breeding season (September through April), have a biologist familiar with nēnē nesting behavior survey for nests in and around the project area prior to the resumption of any work. Repeat surveys after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest).
- Cease all work immediately and contact the Service for further guidance if a nest is discovered within a radius of 150 feet of proposed project, or a previously undiscovered nest is found within the 150-foot radius after work begins.
- In areas where nēnē are known to be present, post and implement reduced speed limits, and inform project personnel and contractors about the presence of endangered species on-site.

#### *Hawaiian waterbirds*

Hawaiian waterbirds are currently found in a variety of wetland habitats including freshwater marshes and ponds, coastal estuaries and ponds, artificial reservoirs, kalo or taro (*Colocasia esculenta*) lo'i or patches, irrigation ditches, sewage treatment ponds, and in the case of the Hawaiian duck, montane streams and marshlands. Hawaiian stilts may also be found wherever ephemeral or persistent standing water may occur.

To avoid and minimize potential project impacts to Hawaiian waterbirds we recommend you incorporate the following measures into your project description:

- In areas where waterbirds are known to be present, post and implement reduced speed limits, and inform project personnel and contractors about the presence of endangered species on-site.
- If water resources are located within or adjacent to the project site, incorporate applicable best management practices regarding work in aquatic environments into the project design (see enclosure).
- Have a biological monitor that is familiar with the species' biology conduct Hawaiian waterbird nest surveys where appropriate habitat occurs within the vicinity of the proposed project site prior to project initiation. Repeat surveys again within 3 days of project initiation and after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest). If a nest or active brood is found:
  - Contact the Service within 48 hours for further guidance.
  - Establish and maintain a 100-foot buffer around all active nests and/or broods until the chicks/ducklings have fledged. Do not conduct potentially disruptive activities or habitat alteration within this buffer.

- Have a biological monitor that is familiar with the species' biology present on the project site during all construction or earth moving activities until the chicks/ducklings fledge to ensure that Hawaiian waterbirds and nests are not adversely impacted.

#### *Hawaiian seabirds*

Hawaiian seabirds may traverse the project area at night during the breeding, nesting, and fledging seasons (March 1 to December 15). Outdoor night lighting can cause seabird disorientation, fallout, and injury or mortality when seabirds are attracted to lights and after circling the lights, they may become exhausted and collide with nearby wires, buildings, or other structures or they may land on the ground. Fledglings are particularly vulnerable to light attraction when they are traversing the project area between September 15 and December 15, as they are making their first flights from their mountain nests to the sea. Downed seabirds are subject to increased mortality due to collision with automobiles, starvation, and predation by dogs, cats, and other predators.

To avoid and minimize potential project impacts to seabirds we recommend you incorporate the following measures into your project description:

- Fully shield all outdoor lights so the bulb can only be seen from below.
- Install automatic motion sensor switches and controls on all outdoor lights or turn off lights when human activity is not occurring in the lighted area.
- Avoid nighttime construction during the seabird fledging period, September 15 through December 15.

#### *Hawaiian sea turtles*

The Service consults on sea turtles and their use of terrestrial habitats (beaches where nesting and/or basking is known to occur), whereas the National Oceanic and Atmospheric Administration (NOAA) Fisheries consults on sea turtles in aquatic habitats. We recommend that you consult with NOAA Fisheries regarding the potential impacts from the proposed project if it may affect offshore or open ocean habitats.

Green sea turtles may nest on any sandy beach area in the Pacific Islands. Hawksbill sea turtles exhibit a wide tolerance for nesting substrate (ranging from sandy beach to crushed coral) with nests typically placed under vegetation. Both species exhibit strong nesting site fidelity. Nesting occurs on beaches from May through September, peaking in June and July, with hatchlings emerging through November and December.

Construction on, or in the vicinity of, beaches can result in sand and sediment compaction, sea turtle nest destruction, beach erosion, contaminant and nutrient runoff, and an increase in direct and ambient light pollution which may disorient hatchlings or deter nesting females. Off-road vehicle traffic may result in direct impacts to sea turtles or nests, and also contributes to habitat degradation through erosion and compaction.

To avoid and minimize project impacts to sea turtles and their nests we recommend you incorporate the following measures into your project description:

- No vehicle use on or modification of the beach/dune environment during the sea turtle nesting or hatching season (May to December).
- Do not remove native dune vegetation.
- Incorporate applicable best management practices regarding Work in Aquatic Environments (see enclosed) into the project design.
- Have a biologist familiar with sea turtles conduct a visual survey of the project site to ensure no basking sea turtles are present.
  - If a basking sea turtle is found within the project area, cease all mechanical or construction activities within 100 feet until the animal voluntarily leaves the area.
  - Cease all activities between the basking turtle and the ocean.
- Remove any project-related debris, trash, or equipment from the beach or dune if not actively being used.
- Do not stockpile project-related materials in the intertidal zone, reef flats, sandy beach and adjacent vegetated areas, or stream channels.

Optimal sea turtle nesting habitat is a dark beach free of barriers that restrict sea turtle movement. Nesting turtles may be deterred from approaching or laying successful nests on lighted or disturbed beaches. They may become disoriented by artificial lighting, leading to exhaustion and placement of a nest in an inappropriate location (such as at or below the high tide line). Hatchlings that emerge from nests may also be disoriented by artificial lighting. Inland areas visible from the beach should be sufficiently dark to allow for successful navigation by hatchlings to the ocean.

To avoid and minimize project impacts to sea turtles from lighting we recommend incorporating the following applicable measures into your project description:

- Avoid nighttime work during the nesting and hatching season (May to December).
- Minimize the use of lighting on or near beaches and shield all project-related lights so the light is not visible from any beach.
  - If lights can't be fully shielded or if headlights must be used, fully enclose the light source with light filtering tape or filters.
- Incorporate design measures into the construction or operation of buildings adjacent to the beach to reduce ambient outdoor lighting such as:
  - tinting or using automatic window shades for exterior windows that face the beach;
  - reducing the height of exterior lighting to below 3 feet and pointed downward or away from the beach; and
  - minimize light intensity to the lowest level feasible and, when possible, include timers and motion sensors.

#### *Blackburn's sphinx moth*

The adult Blackburn's sphinx moth feeds on nectar from native plants, including beach morning glory (*Ipomoea pes-caprae*), 'ilie'e (*Plumbago zeylanica*), maiapilo (*Capparis sandwichiensis*), and others. Blackburn's sphinx moth larvae feed on non-native tree tobacco (*Nicotiana glauca*)

and native 'aiea (*Nolhocestrum* spp.). To pupate, the larvae burrow into the soil and can remain in a state of torpor for a year or more before emerging from the soil. Soil disturbance can result in death of the pupae.

The DEIS reported that field surveys conducted in 2021 by AECOS biologists did not find any host plants species for the moth. The Service does recommend conducting pre-construction surveys as the non-native tree tobacco is commonly found throughout the North Kona area and often establishes in disturbed areas, such as construction sites. We offer the following survey recommendations to assess whether the Blackburn's sphinx moth occurs within the project area:

- A biologist familiar with the species should survey areas of proposed activities for Blackburn's sphinx moth and its larval host plants prior to work initiation.
  - Surveys should be conducted during the wettest portion of the year (usually November-April or several weeks after a significant rain) and within 4-6 weeks prior to construction.
  - Surveys should include searches for adults, eggs, larvae, and signs of larval feeding (chewed stems, frass, or leaf damage).
  - If moths, eggs, larvae, or native 'aiea or tree tobacco over 3 feet tall, are found during the survey, please contact the Service for additional guidance to avoid impacts to this species.

If no Blackburn's sphinx moth, 'aiea, or tree tobacco are found during surveys, it is imperative that measures be taken to avoid attraction of Blackburn's sphinx moth to the project location and prohibit tree tobacco from entering the site. Tree tobacco can grow greater than 3 feet tall in approximately 6 weeks. If it grows over 3 feet, the plants may become a host plant for Blackburn's sphinx moth. We therefore recommend that you:

- Remove any tree tobacco less than 3 feet tall.
- Monitor the site every 4-6 weeks for new tree tobacco growth before, during, and after the proposed ground-disturbing activity.
  - Monitoring for tree tobacco can be completed by any staff, such as groundskeeper or regular maintenance crew, provided with picture placards of tree tobacco at different life stages.

We appreciate your efforts to conserve protected species. If you have questions regarding this response, please contact Colleen Cole, Fish and Wildlife Biologist (phone: 808-460-7697, email: [Colleen\\_Cole@fws.gov](mailto:Colleen_Cole@fws.gov)).

Sincerely,

**CHELSEIE**  
**JAVAR-SALAS**

Digitally signed by  
 CHELSEIE JAVAR-SALAS  
 Date: 2024.04.09  
 22:03:28 -1000

Chelsie Javar-Salas  
 Acting Island Team Manager - Maui Nui and Hawai'i Island  
 Pacific Islands Fish and Wildlife Office

**Attachments: A: Invasive Species Biosecurity Protocols**  
**B: BMPs For Work In or Around Aquatic Environment**

## Attachment A: Invasive Species Biosecurity Protocols: Hawai'i Island Biosecurity Protocols

The following biosecurity protocol (based on National Park Service, State of Hawai'i, U.S. Fish and Wildlife, U.S. Geological Survey, and the DOI Office of Native Hawaiian Relations guidance) should be followed when operating on Hawai'i Island to prevent the introduction of harmful invasive species including frogs, ants, weeds, and fungi into local natural areas (e.g., Hawai'i Volcanoes National Park, Hakalau Forest National Wildlife Refuge, State of Hawai'i "Natural Areas") and areas with native habitat (habitat that is primarily composed of native vegetation), other islands in Hawaiian archipelago, or the U.S. mainland. The protocol also includes suggestions for keeping field staff safe from certain invasive species.

### 1. All work vehicles, machinery, and equipment should be cleaned, inspected by its user, and found free of mud, dirt, debris and invasive species prior to entry into the natural areas or native habitat.

- Vehicles, machinery, and equipment must be thoroughly pressure washed in a designated cleaning area and visibly free of mud, dirt, plant debris, insects, frogs (including frog eggs) and other vertebrate species such as rats, mice and non-vegetative debris. A hot water wash is preferred. Areas of particular concern include bumpers, grills, hood compartments, areas under the battery, wheel wells, undercarriage, cabs, and truck beds (truck beds with accumulated material (intentionally placed or fallen from trees) are prime sites for hitchhikers).
- The interior and exterior of vehicles, machinery, and equipment must be free of rubbish and food. The interiors of vehicles and the cabs of machinery must be vacuumed clean. Floor mats shall be sanitized with a solution of >70% isopropyl alcohol or a freshly mixed 10% bleach solution.
- Any machinery, vehicles, equipment, or other supplies found to be infested with ants (or other invasive species) must not enter natural areas or native habitat. Treatment is the responsibility of the equipment or vehicle owner and operator.

### 2. Little Fire Ants – All work vehicles, machinery, and equipment should be inspected for invasive ants prior to entering the natural areas or native habitat.

- A visual inspection for little fire ants should be conducted prior to entry into natural areas or native habitat.
- Hygiene is paramount but even the cleanest vehicle can pick up a little fire ant. Place MaxForce Complete Brand Granular Insect Bait (1.0% Hydramethylnon; <http://littlefireants.com/Maxforce%20Complete.pdf>) into refillable tamper resistant bait stations. An example of a commercially available refillable tamper resistant bait station is the [Ant Café Pro](https://www.antcafe.com/) (<https://www.antcafe.com/>). Place a bait station (or stations) in vehicle. Note larger vehicles, such as trucks, may require multiple stations. Monitor bait stations frequently (every week at a minimum) and replace bait as needed. If the station does not have a sticker to identify the contents, apply a sticker listing contents to the station.

- Any machinery, vehicles, equipment, or other supplies found to be infested with ants (or other invasive species) must not enter natural areas or native habitat until it is sanitized and re-tested following a resting period. Infested vehicles must be sanitized following recommendations by the Hawaii Ant Lab (<http://www.littlefireants.com/>) or other ant control expert and in accordance with all State and Federal laws. Treatment is the responsibility of the equipment or vehicle owner.

d. Gravel, building materials, or other equipment such as portable buildings should be baited using MaxForce Complete Brand Granular Insect Bait (1.0% Hydramethylnon; <http://littlefireants.com/Maxforce%20Complete.pdf>) or AmdroPro (0.73% Hydramethylnon; <http://littlefireants.com/Amdro%20Pro.pdf>) following label guidance.

- Storage areas that hold field tools, especially tents, taps, and clothing should be baited using MaxForce Complete Brand Granular Insect Bait (1.0% Hydramethylnon; <http://littlefireants.com/Maxforce%20Complete.pdf>) or AmdroPro (0.73% Hydramethylnon; <http://littlefireants.com/Amdro%20Pro.pdf>) following label guidance.

### 3. Base yards and staging areas inside and outside areas must be kept free of invasive species.

- Base yards and staging areas should be inspected at least weekly for invasive species, and any found invasive removed immediately. Pay particular attention to where vehicles are parked overnight, keeping areas within 10-meters of vehicles free of debris. Parking on pavement and not under trees, while not always practical is best.
- Project vehicles or equipment stored outside of a base yard or staging area, such as a private residence, should be kept in a pest free area.

### 4. All cutting tools must be sanitized to prevent the Rapid 'Ōhi'a Death (ROD) fungus.

- Avoid wounding 'ōhi'a trees and roots with mowers, chainsaws, weed eaters, and other tools. Cut only the minimum number of trees and branches as approved for the project.
  - All cutting tools, including machetes, chainsaws, and loppers must be sanitized to remove visible dirt and other contaminants prior to entry into natural areas or areas with native habitat, and when moving to a new project area within the native habitat area. Tools may be sanitized using a solution of >70% isopropyl alcohol or a freshly mixed 10% bleach solution. One minute after sanitizing, you may apply an oil based lubricant to chainsaw chains or other metallic parts to prevent corrosion.
  - Only dedicated tools and chainsaws should be used to sample known or suspected ROD infected trees.
  - Vehicles, machinery, and equipment must be cleaned as described in (1) above.
- 5. Imported firewood, logs, and 'ōhi'a parts:**
- 'Ōhi'a firewood, 'ōhi'a logs, and 'ōhi'a parts should not be transported.

**6. For individuals working in the field:**

- a. **Before going into the field**, visually inspect and clean your clothes, boots, pack, radio harness, tools and other personal gear and equipment, for seeds, soil, plant parts, insects, and other debris. A small brush is handy for cleaning boots, equipment and gear. Soles of shoes should be sanitized using a solution of >70% isopropyl alcohol or a freshly mixed 10% bleach solution.
- b. **Immediately before leaving the field**, visually inspect and clean your clothes, boots, pack, radio harness, tools, and other personnel gear and equipment, for seeds, soil, plant parts, insects, and other debris. Soles of shoes should be sanitized using a solution of >70% isopropyl alcohol or a freshly mixed 10% bleach solution.
- c. **Little fire ants nest in trees**. If you are under a tree and that tree is bumped or somehow stressed, the threat response of the ants is to fall from the leaves and sting the person under the tree. If you are subject to an ant attack, do not panic. The ants are extremely small, but their stings are painful so make sure you remove all ants from your body and clothing. The stings cause inch long welts that are itchy and painful and can last for weeks. Treat stings as you would other insect stings. In some persons stings can produce life threatening reactions. Stocking antihistamine in the first aid kit is a reasonable precaution.
- d. **Rat Lungworm disease** is caused by a parasite that can infect humans who consume raw or undercooked infected snails or slugs or consume raw produce that contains a small infected snail or slug. Infection is rare but can be serious. Symptoms can include severe headache, neck stiffness, low grade fever, nausea, and vomiting anywhere from 1-6 weeks after exposure. The disease is not spread person to person. Anyone who handles snails or slugs should wear gloves and/or wash hands. Eating unwashed produce is discouraged.

**Attachment B: BMPs For Work In or Around Aquatic Environment**

**U.S. Fish and Wildlife Service  
Recommended Standard Best Management Practices (BMPs)**

The U.S. Fish and Wildlife Service (Service) recommends the following measures are incorporated into project planning to avoid or minimize impacts to fish and wildlife resources. Incorporation of these BMPs may reduce negative impacts to aquatic habitats from project construction-related activities. These BMPs are recommended in addition to, and do not over-ride any terms, conditions, or other recommendations prepared by the Service, other Federal, state, or local agencies. Please contact the Service Aquatic Ecosystems Conservation Program at 808-792-9400 with any questions.

1. Authorized dredging and filling-related activities that may result in the temporary or permanent loss of aquatic habitats should be designed to avoid indirect, negative impacts to aquatic habitats that extend beyond the planned project area.
2. Dredging/filling in the marine environment should be scheduled to avoid coral spawning and recruitment periods, and sea turtle nesting and hatching periods. Because these periods vary throughout the Pacific islands, we recommend contacting the relevant local, state, or Federal fish and wildlife resource agency for site specific guidance.
3. Turbidity and siltation from project-related work should be minimized and contained within the project area by silt containment devices and curtailment work during flooding or adverse tidal and weather conditions. The BMPs should occur for the life of the construction period until turbidity and siltation within the project area is stabilized. All project construction-related debris and sediment containment devices should be removed and disposed of at an approved site.
4. All project construction-related materials and equipment (i.e., dredges, vessels, backhoes, silt curtains, etc.) to be placed in an aquatic environment should be inspected for pollutants including, but not limited to: marine fouling organisms, grease, oil, etc., and cleaned to remove pollutants prior to use. Project related activities should not result in any debris disposal, non-native species introductions, or attraction of non-native pests to the affected or adjacent aquatic or terrestrial habitats. Implementing both a litter-control plan and a Hazard Analysis and Critical Control Point plan (HACCP – see <https://www.fws.gov/policy/AI/50fwj.html>) can prevent attraction and introduction of non-native species.
5. Project construction-related materials (i.e., fill, revetment rock, pipe, etc.) should not be stockpiled in, or in close proximity to aquatic habitats and should be protected from erosion (e.g., with filter fabric, etc.), to prevent materials from being carried into waters by wind, rain, or high surf.
6. Fueling of project-related vehicles and equipment should occur away from the aquatic environment and a contingency plan to control petroleum products accidentally spilled during the project should be developed. The plan should be retained on site with the person responsible for compliance with the plan. Absorbent pads and containment booms should be stored on-site to facilitate the clean-up of accidental petroleum releases.
7. All deliberately exposed soil or under-layer materials used in the project near water should be protected from erosion and stabilized as soon as possible with geotextile, filter fabric or native or non-invasive vegetation matting, hydro-seeding, etc.



**State of Hawai'i**



## Department of Land and Natural Resources, Hawaii State Aha Moku

My name is Charles Young. I reside in the Ahupua`a of Kealia, I I South Kona. As the current Po`o of the Hawaii Island `Aha Moku I am pleased to submit the following comments on the Kamehameha Schools, Keaouhou Bay Management Plan Draft Environmental Impact Statement. The `Aha Moku was created by the Hawaii State Legislature under act 288, which recognized that Hawaii has suffered through extensive changes to the Native Hawaiian Culture, Language, Values and Land Tenure system resulting in the following o Overdevelopment of coastlines o Alterations of freshwater streams o Destruction of watersheds o Decimation of coral reefs o The decline of endemic marine and terrestrial species The `Aha Moku serves in an advisory capacity to the Chairperson of the Hawaii State Department of Land and Natural Resources (DLNR) so regional concerns from individual communities can be brought to the DLNR and issues can be addressed and if needed, mitigated. In serving their individual communities the Island `Aha Moku seek to • Integrate indigenous resource management practices with western management. • Identify a comprehensive set of indigenous practices for natural resource management. • Foster understanding and practical use of Native Hawaii resource knowledge, methodology, and expertise • Sustain the State's marine, land, cultural, agricultural, and natural resources • Provide community education and foster cultural awareness of the benefits of the `Aha Moku system. Vhen striving to meet its goals the `Aha Moku is also guided by the Hawaii Supreme Court's 2000 decision in the Ka Pa`akai 0 Ka |Aina vs State Land Use Commission decision which requires the State and its agencies to 1. Identity and scope of valued cultural historical, or natural resources in the...area, including the extent to which traditional customary native Hawaiian rights are exercised in the. . . area; 2. Determine the Extent to which those resources -including traditional and customary Native Hawaiian rights -will be affected or impaired by the proposed action; and 3. Feasible action, if any, to be taken by the agency to reasonably protect such practices if they are found to exist. The Hawaii Island `Aha Moku appreciates the unique significance Of the area and supports having a comprehensive management plan in place for all the reasons stated above. In its introduction Section 1.2 the applicant,

Kamehameha Schools states  
"Keaouhou Bay is perhaps most well known as the birth site and residence of King Kamehameha I (Kamehameha III), who was the son of Kamehameha `Ekahi (Kamehameha I) and Keopuolani." The tAha Moku suffers the above premise as fundamental to the success of any well thought out management plan for the area. Vhen creating the `Aha Moku under Act 288 the Legislature "recognized that Hawaii Tenure system. . . ." Kamehameha III ruled during a period of major change and set in motion the most significant Land Tenure changes in Hawaii's history. Many agree that was the most impactful to Native Hawaiian Culture. The Keaouhou Bay that we see today is a legacy Of that history. AND we should not ignore that the proposed management plan must be a better version. Native Hawaiian rights and practices are driven by our natural environment. Our beliefs on the origins of kanaka maoli are rooted in nature and we see ourselves as part of nature and the health of our natural environment as a reflection of our own health. The Aha Moku is concerned that to date the development and growth of Keaouhou Bay has not sufficiently addressed any Of the `Aha Moku's challenges as stated above and the `Ana Moku hopes to be part of a longer-term revisiting for

Keaouhou Bay. The Aha Moku would first encourage the applicant to work to align all the agencies responsible for supplying the fresh water necessary to meet the plan's objectives. Water is a finite resource and relies on healthy watersheds to capture, filter, and distribute our life-giving water. Private, State and County agencies who are responsible for granting permits to access, distribute, use, and return water to the `Aina should be encouraged to assure its purity. These same agencies should be encouraged to monitor the effects that diverting fresh water from their natural channels is having on our near shore resources like limu, reefs and reef fish. The `Aha Moku is unaware Of any comprehensive monitoring program on the near shore resources of Keaouhou Bay and believes that it would be Of great benefit to know the present health Of the Bay, the cumulative impacts of current use and what improvements can be projected if any by the proposed Management Plan. Before providing comment the `Aha Moku reached out to several kama`aina families from the area. Understandably, there exists some disappointment with past performance however, most look forward to reenvisioning Keaouhou Bay as a place of practice and learning and less so a place of congestion and commerce. The Bay outTently serves as a launching point for commercial and/or on ocean recreational activities. The `Aha Moku notes that there has been a significant increase of permitted commercial activities at Keaouhou that have had far reaching effects on Kona Hema. Known for its marine resources, Kona Hema is now a focal point for commercial tour boat operators and an ever-increasing number of tourists drawn to its natural habitats. These activities need better management from end to end. Communities like Kealakua, Napo`opo`o, Honaunau and Ho`okena are experiencing significant negative impacts to their communities and their resources due to the increasing numbers of tourists. The `Aha Moku supports a management plan that truly manages the use of Keaouhou Bay which presently serves as an unfettered gateway to Kona Hema. Kama`aina also expressed some concern about the development of housing that may invite more offshore interest/investment and not fulfill a more pressing need for kama`aina. Vhen considering cultural impacts, the Aha Moku must consider the importance that housing plays on the stability of a family. The most common concern was how will our future generations be able to live and prosper in our homeland, practice our culture and pass on our learnings to future generations if we cannot afford to live here. The Aha Moku recognizes that this is a much larger issue than any single management plan can address and fully appreciates that Kamehameha Schools was founded on the above cultural aspirations. The current processes for development, do not incorporate the necessary collaboration amongst the State, County and Private sectors particularly when it comes to resource management. As noted above Keaouhou is the birthplace of Kamehameha III, one of Hawaii` s most prominent rulers. The Aha Moku appreciates the cultural legacy Of the area and the Kuleana of Kamehameha Schools and encourages the State and/or County agencies to promote the same values of making the area a welcoming and uniquely Hawaiian place. The Aha Moku appreciates this opportunity to provide comments on the Keaouhou Bay Management plan.



Department of Land and Natural Resources  
 Hawaii State Aha Moku  
 State of Hawaii  
 Post Office Box 621  
 Honolulu, Hawaii 96809

Aloha:

My name is Charles Young. I reside in the Ahupua'a of Kealia II South Kona. As the current Po'o of the Hawaii Island 'Aha Moku I am pleased to submit the following comments on the Kamehameha Schools, Keauhou Bay Management Plan Draft Environmental Impact Statement.

The 'Aha Moku was created by the Hawaii State Legislature under act 288, which recognized that Hawaii has suffered through extensive changes to the Native Hawaiian Culture, Language, Values and Land Tenure system resulting in the following

- o Over-development of coastlines
- o Alterations of freshwater streams
- o Destruction of watersheds
- o Decimation of coral reefs
- o The decline of endemic marine and terrestrial species

The 'Aha Moku serves in an advisory capacity to the Chairperson of the Hawaii State Department of Land and Natural Resources (DLNR) so regional concerns from individual communities can be brought to the DLNR and issues can be addressed and if needed, mitigated. In serving their individual communities the Island 'Aha Moku seek to

- Integrate indigenous resource management practices with western management.
- Identify a comprehensive set of indigenous practices for natural resource management.
- Foster understanding and practical use of Native Hawaii resource knowledge, methodology, and expertise
- Sustain the State's marine, land, cultural, agricultural, and natural resources
- Provide community education and foster cultural awareness of the benefits of the 'Aha Moku system.

When striving to meet its goals the 'Aha Moku is also guided by the Hawaii Supreme Court's 2000 decision in the Ka Paakai O Ka 'Aina vs State Land Use Commission decision which requires the State and its agencies to

1. Identify and scope of valued cultural historical, or natural resources in the...area, including the extent to which traditional customary native Hawaiian rights are exercised in the...area;
2. Determine the Extent to which those resources – including traditional and customary Native Hawaiian rights – will be affected or impaired by the proposed action; and
3. Feasible action, if any, to be taken by the agency to reasonably protect such practices if they are found to exist.

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 State of Hawaii  
 Post Office Box 621  
 Honolulu, Hawaii 96809

The Hawaii Island 'Aha Moku appreciates the unique significance of the area and supports having a comprehensive management plan in place for all the reasons stated above. In its introduction Section 1.2 the applicant, Kamehameha Schools states

**"Keauhou Bay is perhaps most well known as the birth site and resuscitation site of Ka Mō'ī (King) Kaulikeaouli Kaleiopapa Kuakamanolani Mahinalani Kalaninuiwaikua Keaweawe 'ulaokalani (Kamehameha III), who was the son of Kamehameha 'Ekahi (Kamehameha I) and Keōpūolani."**

The 'Aha Moku supports the above premise as fundamental to the success of any well thought out management plan for the area. When creating the 'Aha Moku under Act 288 the Legislature "recognized that Hawaii suffered through extensive changes to the Native Hawaiian Culture, Language, Values and Land Tenure system...". Kamehameha III ruled during a period of major change and set in motion the most significant Land Tenure changes in Hawaii's history. Many agree that was the most impactful to Native Hawaiian Culture. The Keauhou Bay that we see today is a legacy of that history AND we should not ignore that the proposed management plan must be a better version.

Native Hawaiian rights and practices are driven by our natural environment. Our beliefs on the origins of kanaka maoli are rooted in nature and we see ourselves as part of nature and the health of our natural environment as a reflection of our own health.

The Aha Moku is concerned that to date the development and growth of Keauhou Bay has not sufficiently addressed any of the 'Aha Moku's challenges as stated above and the 'Aha Moku hopes to be part of a longer-term revisioning for Keauhou Bay.

The Aha Moku would first encourage the applicant to work to align all the agencies responsible for supplying the fresh water necessary to meet the plan's objectives. Water is a finite resource and relies on healthy watersheds to capture, filter, and distribute our life-giving water. Private, State and County agencies who are responsible for granting permits to access, distribute, use, and return water to the 'Aina should be encouraged to assure its purity.

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Before providing comment the 'Aha Moku reached out to several kama'aina families from the area. Understandably, there exists some disappointment with past performance however, most look forward to re-envisioning Keaouhou Bay as a place of practice and learning and less so a place of congestion and commerce. The Bay currently serves as a launching point for commercial and/or on ocean recreational activities. The 'Aha Moku notes that there has been a significant increase of permitted commercial activities at Keaouhou that have had far reaching effects on Kona Hema. Known for its marine resources, Kona Hema is now a focal point for commercial tour boat operators and an ever-increasing number of tourists drawn to its natural habitats. These activities need better management from end to end. Communities like Kealakekua, Napo'opo'o, Honaunau and Ho'okena are experiencing significant negative impacts to their communities and their resources due to the increasing numbers of tourists. The 'Aha Moku supports a management plan that truly manages the use of Keaouhou Bay which presently serves as an unfettered gateway to Kona Hema. Kama'aina also expressed some concern about the development of housing that may invite more offshore interest/investment and not fulfill a more pressing need for kama'aina. When considering cultural impacts, the Aha Moku must consider the importance that housing plays on the stability of a family. The most common concern was how will our future generations be able to live and prosper in our homeland, practice our culture and pass on our learnings to future generations if we cannot afford to live here. The Aha Moku recognizes that this is a much larger issue than any single management plan can address and fully appreciates that Kamehameha Schools was founded on the above cultural aspirations.

The current processes for development, do not incorporate the necessary collaboration amongst the State, County and Private sectors particularly when it comes to resource management. As noted

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 Molokai Pule Oo (Molokai), Moku O Kakauihewa (Oahu), Manokalanipo (Kauai), Ka Aina O Kawelonaakala (Ni'ihau)  
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above Keaouhou is the birthplace of Kamehameha III, one of Hawaii's most prominent rulers. The Aha Moku appreciates the cultural legacy of the area and the Kuleana of Kamehameha Schools and encourages the State and/or County agencies to promote the same values of making the area a welcoming and uniquely Hawaiian place.

The Aha Moku appreciates this opportunity to provide comments on the Keaouhou Bay Management Plan.

Sincerely,

Charles Young  
 Po'o, Hawaii Island Aha Moku  
 PO Box 505  
 Honaunau, HI. 97826  
[Youngc042@hawaii.rr.com](mailto:Youngc042@hawaii.rr.com)  
 808-987-9052

Cc:

Leimana DaMate, Luna Alakai/Executive Director Hawaii State Aha Moku  
 808-640-1214

[Leimana.k.damate@hawaii.gov](mailto:Leimana.k.damate@hawaii.gov), [Leimana.k.damate@hawaii.gov](mailto:Leimana.k.damate@hawaii.gov)

*Moku O Keawe (Hawaii Island), Moku O Pihlani (Maui), Moku O Kanaloa (Kahooolawe), Nana'i Kaula (Lanai)  
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 Kalaninimoku Bldg., DLNR, 1151 Punchbowl Street, Room 130, Honolulu, HI 96813*



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'ŌI'HANA KUMUWAIWAI 'ĀINA  
LAND DIVISION

P.O. BOX 621  
HONOLULU, HAWAII 96809

August 8, 2024



Group 70 International, Inc., dba G70  
Attn: Mr. Kawika McKeague, Principal Planner  
111 S. King Street, Suite 170  
Honolulu, Hawaii 96813-4307  
via email: [KeaouhouBay@g70.design](mailto:KeaouhouBay@g70.design)

Dear Mr. McKeague:

**SUBJECT: Draft Environmental Impact Statement for Keaouhou Bay Management Plan located at Keaouhou, Island of Hawaii; TMK: (3) 7-8-012:Various & (3) 7-8-010:Various on behalf of Kamehameha Schools**

Thank you for the opportunity to review and comment on the subject matter. The Land Division of the Department of Land and Natural Resources (DLNR) distributed or made available a copy of your request pertaining to the subject matter to DLNR's Divisions for their review and comments.

At this time, enclosed are comments from the (a) Division of Boating and Ocean Recreation, (b) Engineering Division, (c) Commission on Water Resource Management, (d) Office of Conservation & Coastal Lands, and (e) Land Division – Hawaii District on the subject matter. Should you have any questions, please feel free to contact Darlene Nakamura at (808) 587-0417 or email: [darlene.k.nakamura@hawaii.gov](mailto:darlene.k.nakamura@hawaii.gov). Thank you.

Sincerely,

*Russell Tsuji*

Russell Y. Tsuji  
Land Administrator

Enclosures  
cc: Central Files

Keaouhou Bay Management Plan  
Draft Environmental Impact Statement

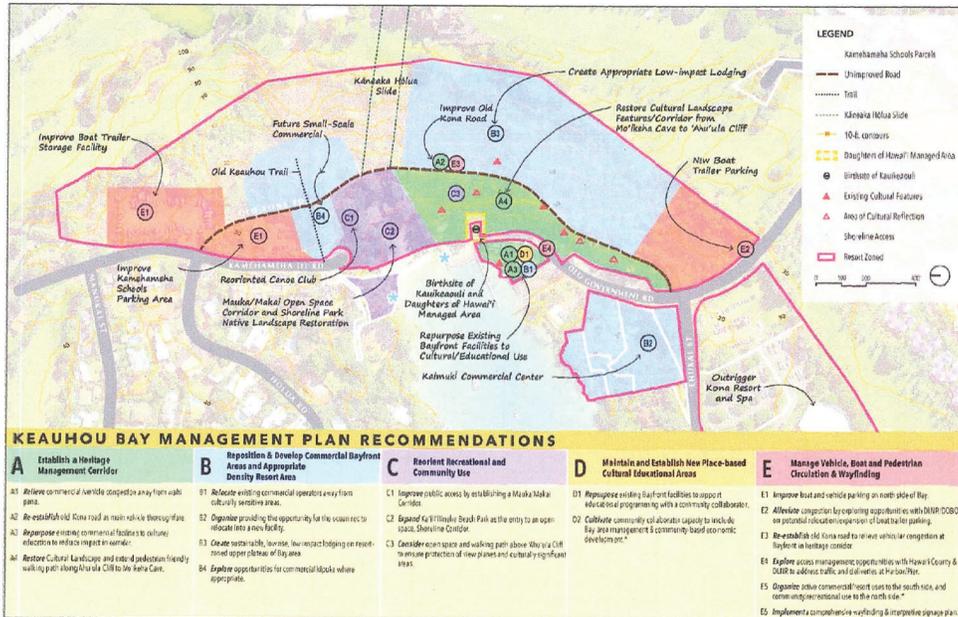


Figure 3-34

Keaouhou Bay Management Plan



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES | KA OI'HANA KUMU'ĀIWA'I 'ĀINA  
**COMMISSION ON WATER RESOURCE MANAGEMENT | KE KAHUWAI PONO**  
P.O. BOX 321  
HONOLULU, HAWAII 96809

DAVIN S. CHANG  
DIRECTOR  
KENNETH S. FINK, M.D., MSA, MPH  
AURORA KAGAWA/VIWIANI, PH.D.  
WAYNE K. KATAYAMA  
JAMES M. MCKEE, M.D., M.P.H.  
LAWRENCE H. MIKE, M.D., J.D.

DEAN D. UYENO  
ACTING DEPUTY DIRECTOR

Jul 29, 2024

REF: RFD-5883.8

TO: Russell Y. Tsuji, Land Administrator  
FROM: Dean D. Uyeno, Acting Deputy Director  
Commission on Water Resource Management

SUBJECT: Kamehameha Schools Keauhou Bay Management Plan

FILE NO.: RFD-5883.8  
TMK NO.: (3) 7-8-010:044, (3) 7-8-010:049, (3) 7-8-012:004, (3) 7-8-012:007, (3) 7-8-012:013, (3) 7-8-012:014, (3) 7-8-012:027, (3) 7-8-012:048, (3) 7-8-012:054, (3) 7-8-012:061, (3) 7-8-012:065, (3) 7-8-012:098, (3) 7-8-012:101, (3) 7-8-012:103

Thank you for the opportunity to review the subject document. The Commission on Water Resource Management (CWRM) is the agency responsible for administering the State Water Code (Code). Under the Code, all waters of the State are held in trust for the benefit of the citizens of the State, therefore all water use is subject to legally protected water rights. CWRM strongly promotes the efficient use of Hawaii's water resources through conservation measures and appropriate resource management. For more information, please refer to the State Water Code, Chapter 174C, Hawaii Revised Statutes, and Hawaii Administrative Rules, Chapters 13-167 to 13-171. These documents are available via the internet at <http://dlnr.hawaii.gov/cwrm>.

Our comments related to water resources are checked off below.

- 1. We recommend coordination with the county to incorporate this project into the county's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.
- 2. We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.
- 3. We recommend coordination with the Hawaii Department of Agriculture (HDOA) to incorporate the reclassification of agricultural zoned land and the redistribution of agricultural resources into the State's Agricultural Water Use and Development Plan (AWUDP). Please contact the HDOA for more information.
- 4. We recommend that water efficient fixtures be installed and water efficient practices implemented throughout the development to reduce the increased demand on the area's freshwater resources. Reducing the water usage of a home or building may earn credit towards Leadership in Energy and Environmental Design (LEED) certification. More information on LEED certification is available at <http://www.usgbc.org/leed>. A listing of fixtures certified by the EAP as having high water efficiency can be found at <http://www.epa.gov/watersense>.
- 5. We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. Stormwater management BMPs may earn credit toward LEED certification. More information on stormwater BMPs can be found at <http://planning.hawaii.gov/cwrm/initiatives/low-impact-development/>
- 6. We recommend the use of alternative water sources, wherever practicable.
- 7. We recommend participating in the Hawaii Green Business Program, that assists and recognizes businesses that strive to operate in an environmentally and socially responsible manner. The program description can be found online at <http://energy.hawaii.gov/green-business-program>.
- 8. We recommend adopting landscape irrigation conservation best management practices endorsed by the Landscape Industry Council of Hawaii. These practices can be found online at [http://www.hawaiilandscape.com/wp-content/uploads/2013/04/LICH\\_Irrigation\\_Conservation\\_BMPs.pdf](http://www.hawaiilandscape.com/wp-content/uploads/2013/04/LICH_Irrigation_Conservation_BMPs.pdf).

Page 2  
July 29, 2024

- 9. There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.
- 10. The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit is required prior to use of water. The Water Use Permit may be conditioned on the requirement to use dual line water supply systems for new industrial and commercial developments.
- 11. The Hawaii Water Plan is directed toward the achievement of the utilization of reclaimed water for uses other than drinking and for potable water needs in one hundred per cent of State and County facilities by December 31, 2045 (§174C-31(g)(6), Hawaii Revised Statutes). We strongly recommend that this project consider using reclaimed water for its non-potable water needs, such as irrigation. Reclaimed water may include, but is not limited to, recycled wastewater, gray water, and captured rainwater/stormwater. Please contact the Hawaii Department of Health, Wastewater Branch, for more information on their reuse guidelines and the availability of reclaimed water in the project area.
- 12. A Well Construction Permit(s) is (are) are required before the commencement of any well construction work.
- 13. A Pump Installation Permit(s) is (are) required before ground water is developed as a source of supply for the project.
- 14. There is (are) well(s) located on or adjacent to this project. If wells are not planned to be used and will be affected by any new construction, they must be properly abandoned and sealed. A permit for well abandonment must be obtained.
- 15. Ground-water withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.
- 16. A Stream Channel Alteration Permit(s) is (are) required before any alteration can be made to the bed and/or banks of a stream channel.
- 17. A Stream Diversion Works Permit(s) is (are) required before any stream diversion works is constructed or altered.
- 18. A Petition to Amend the Interim Instream Flow Standard is required for any new or expanded diversion(s) of surface water.
- 19. The planned source of water for this project has not been identified in this report. Therefore, we cannot determine what permits or petitions are required from our office, or whether there are potential impacts to water resources.
- OTHER:

If you have any questions, please contact Ryan Imata of the Regulation Branch at (808) 587-0225 or Katie Roth of the Planning Branch (808) 587-0216.



STATE OF HAWAII | KA MOKU'ANA 'O HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'AINA  
LAND DIVISION

P.O. BOX 621  
HONOLULU, HAWAII 96809

June 26, 2024

**MEMORANDUM**

FROM: **IQ:**

**DLNR Agencies:**

- X Div. of Aquatic Resources ([Kendall.i.tucker@hawaii.gov](mailto:Kendall.i.tucker@hawaii.gov))
- X Div. of Boating & Ocean Recreation ([richard.t.howard@hawaii.gov](mailto:richard.t.howard@hawaii.gov))
- X Engineering Division ([DLNR\\_ENGR@hawaii.gov](mailto:DLNR_ENGR@hawaii.gov))
- X Div. of Forestry & Wildlife ([rubytrosat.ferrago@hawaii.gov](mailto:rubytrosat.ferrago@hawaii.gov))
- Div. of State Parks
- X Commission on Water Resource Management ([DLNR\\_CWRM@hawaii.gov](mailto:DLNR_CWRM@hawaii.gov))
- X Office of Conservation & Coastal Lands ([sharleen.k.kuba@hawaii.gov](mailto:sharleen.k.kuba@hawaii.gov))
- X Land Division - Hawaii District ([gordon.c.heit@hawaii.gov](mailto:gordon.c.heit@hawaii.gov))
- X Aha Moku Advisory Committee ([leimana.k.damate@hawaii.gov](mailto:leimana.k.damate@hawaii.gov))

TO:

**FROM:** Russell Y. Tsuji, Land Administrator  
**SUBJECT:** Draft Environmental Impact Statement for Keaunoh Bay Management Plan  
**LOCATION:** Keaunoh, Island of Hawaii; TMK: (3) 7-8-012:Various & (3) 7-8-010:Various  
**APPLICANT:** G70 on behalf of Kamehameha Schools

Transmitted for your review and comment is information on the above-referenced subject matter. The DEIS was published on June 23, 2024, by the State Environmental Review Program (formerly the Office of Environmental Quality Control) at the Office of Planning and Sustainable Development in the periodic bulletin, The Environmental Notice, available at the following link:

[https://files.hawaii.gov/dbedt/erp/The\\_Environmental\\_Notice/2024-06-23-TEN.pdf](https://files.hawaii.gov/dbedt/erp/The_Environmental_Notice/2024-06-23-TEN.pdf)

Please submit any comments by **August 6, 2024**. If no response is received by this date, we will assume your agency has no comments. Should you have any questions, please contact Darlene Nakamura directly via email at [darlene.k.nakamura@hawaii.gov](mailto:darlene.k.nakamura@hawaii.gov). Thank you.

**BRIEF COMMENTS:**

- ( ) We have no objections.
- ( ) We have no comments.
- ( ) We have no additional comments.
- (✓) Comments are included/attached.

Signed:   
 Print Name: Cary S. Chang, Chief Engineer  
 Division: Engineering Division  
 Date: Jul 1, 2024

Attachments  
cc: Central Files

DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

**LD/Russell Y. Tsuji**  
**Ref:** Draft Environmental Impact Statement for Keaunoh Bay Management Plan  
**LOCATION:** Keaunoh, Island of Hawaii  
**TMK(s):** (3) 7-8-012:Various & (3) 7-8-010:Various  
**Applicant:** G70 on behalf of Kamehameha Schools

**COMMENTS**

The rules and regulations of the National Flood Insurance Program (NFIP), Title 44 of the Code of Federal Regulations (44CFR), are in effect when development falls within a Special Flood Hazard Area (high-risk areas). Be advised that 44CFR, Chapter 1, Subchapter B, Part 60 reflects the minimum standards as set forth by the NFIP. Local community flood ordinances may stipulate higher standards that can be more restrictive and would take precedence over the minimum NFIP standards.

The owner of the project property and/or their representative is responsible for researching the Flood Hazard Zone designation for the project. Flood zones subject to NFIP requirements are identified on FEMA's Flood Insurance Rate Maps (FIRM). The official FIRMs can be accessed through FEMA's Map Service Center ([msc.fema.gov](http://msc.fema.gov)). Our Flood Hazard Assessment Tool (FHAT) ([that.hawaii.gov](http://that.hawaii.gov)) could also be used to research flood hazard information.

If there are questions regarding the local flood ordinances, please contact the applicable County NFIP coordinating agency below:

- o Oahu: City and County of Honolulu, Department of Planning and Permitting (808) 768-8098.
- o Hawaii Island: County of Hawaii, Department of Public Works (808) 961-8327.
- o Maui/Molokai/Lanai County of Maui, Department of Planning (808) 270-7139.
- o Kauai: County of Kauai, Department of Public Works (808) 241-4849.

Signed:   
 \_\_\_\_\_  
**CARTY S. CHANG, CHIEF ENGINEER**  
 Date: Jul 1, 2024

1A-24-206  
DAWN N. S. CHANG  
COMMISSIONER  
OFFICE OF CONSERVATION  
AND COASTAL LANDS



RECEIVED  
LAND DIVISION  
JUL 18 AM 10:30  
STATE OF HAWAII

DEPT. OF LAND & NATURAL RESOURCES  
LAND DIVISION  
P.O. BOX 621  
HONOLULU, HAWAII 96809

State Department of Health, Clean Air Branch  
Aloha, Thank you for the opportunity to provide comments on the subject EISPN for the Keauhou Bay Management Plan. The Clean Air Branch would like to make the following comments on the subject DEA: For construction and other activities associated with the project, the applicable provisions of Hawaii Administrative Rules §11-60.1-33 shall be followed to mitigate fugitive dust impacts. Also, please see our standard comments at: <https://health.hawaii.gov/cab/files/2022/05/Standard-Comments-for-Land-Use-Reviews-Clean-Air-Branch-2022-1.pdf> Please let me know if you have any questions or concerns.

June 26, 2024

MEMORANDUM

TO: DLNR Agencies:  
X Div. of Aquatic Resources (Kendall.I.tucker@hawaii.gov)  
X Div. of Boating & Ocean Recreation (richard.t.howard@hawaii.gov)  
X Engineering Division (DLNR\_ENGR@hawaii.gov)  
X Div. of Forestry & Wildlife (lubyrosa.t.terrao@hawaii.gov)  
X Div. of State Parks  
X Commission on Water Resource Management (DLNR\_CWRM@hawaii.gov)  
X Office of Conservation & Coastal Lands (sharleen.k.kuba@hawaii.gov)  
X Land Division - Hawaii District (jordan.c.heil@hawaii.gov)  
X Aha Moku Advisory Committee (leimana.k.damate@hawaii.gov)

FROM: Russell Y. Tsuji, Land Administrator  
SUBJECT: Draft Environmental Impact Statement for Keauhou Bay Management Plan  
LOCATION: Keauhou, Island of Hawaii. TMK: (3) 7-8-012:Various & (3) 7-8-010:Various  
APPLICANT: G70 on behalf of Kamehameha Schools

Transmitted for your review and comment is information on the above-referenced subject matter. The DEIS was published on June 23, 2024, by the State Environmental Review Program (formerly the Office of Environmental Quality Control) at the Office of Planning and Sustainable Development in the periodic bulletin, The Environmental Notice, available at the following link: [https://files.hawaii.gov/dbedt/erp/The Environmental Notice/2024-06-23-TEN.pdf](https://files.hawaii.gov/dbedt/erp/The%20Environmental%20Notice/2024-06-23-TEN.pdf)

Please submit any comments by August 6, 2024. If no response is received by this date, we will assume your agency has no comments. Should you have any questions, please contact Darlene Nakamura directly via email at [darlene.k.nakamura@hawaii.gov](mailto:darlene.k.nakamura@hawaii.gov). Thank you.

BRIEF COMMENTS:  
Not in Conservation District  
( ) We have no objections.  
(x) We have no comments.  
( ) We have no additional comments.  
( ) Comments are included/attached.  
Signed: *[Signature]*  
Print Name: Kariann Stark  
Division: OCLL  
Date: 7/17/2024

Attachments  
cc: Central Files

## Department of Health, Solid & Hazardous Waste Branch

### Solid Waste Section:

Chapters 342H and 342I, HRS, and chapter 11-58.1, HAR, "Solid Waste Management Control" requires the proper management of solid wastes. Generators of solid waste are required to ensure that their wastes are properly delivered to permitted solid waste management facilities. Project managers should require their waste contractors to submit disposal (and recycling) receipts and invoices to ensure proper disposal (or recycling) of wastes.

### OSWM:

Chapter 342G, HRS, encourages the reduction of waste generation, reuse of discarded materials, and the recycling of solid waste. The project developer is highly encouraged to develop a solid waste management plan for each construction project to ensure proper handling of wastes and divert recyclables from being landfilled. Ideally, the plan would seek to maximize waste diversion and minimize disposal. Such plans should include designated areas to promote the collection of reusable and recyclable materials.

**County of Hawai'i**



Mitchell D. Roth  
Mayor



**County of Hawai'i**  
POLICE DEPARTMENT  
349 Kapi'olani Street • Hilo, Hawaii 96720-3998  
(808) 935-3311 • Fax: (808) 961-2389

July 18, 2024

Mr. Kawika McKeague, AICP  
Principal Planner  
Group 70 International Inc. dba G70  
111 S. King Street, Suite 170  
Honolulu, HI 96813

Benjamin T. Moszkowicz  
Police Chief

Reed K. Mahuna  
Deputy Police Chief

JOSH GREEN, M.D.  
SYLVIA LIUKE  
LEIFEMAYI GOVERNMENT IMA HOPE KUA'AINA



STATE OF HAWAII | KA MOKU'AINA O HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'AINA  
LAND DIVISION



P.O. BOX 621  
HONOLULU, HAWAII 96809  
June 26, 2024

**MEMORANDUM**

**DLNR Agencies:**

- X Div. of Aquatic Resources (kendall.i.tucker@hawaii.gov)
- X Div. of Boating & Ocean Recreation (richard.l.howard@hawaii.gov)
- X Engineering Division (DLNR.ENGR@hawaii.gov)
- X Div. of Forestry & Wildlife (rubbyrosa.t.terrago@hawaii.gov)
- X Div. of State Parks
- X Commission on Water Resource Management (DLNR.CWRM@hawaii.gov)
- X Office of Conservation & Coastal Lands (sharleen.k.kuba@hawaii.gov)
- X Land Division - Hawaii District (gordon.c.helt@hawaii.gov)
- X Aha Moku Advisory Committee (leimana.k.damate@hawaii.gov)

TO: From

FROM: To:  
SUBJECT:  
LOCATION:  
APPLICANT:

Aloha Mr. McKeague:  
This is in response to your letter dated June 24, 2024. In that letter, you provided interested parties a 45-day notice to submit any comments regarding the Draft Environmental Impact Statement for the Kamehameha Schools Keauhou Bay Management Plan.  
Staff has reviewed the application and has no comments or objections to offer at this time.

Should you have any questions or concerns, please contact Acting Administrative Lieutenant Brandon Mansur of our Kona Patrol Division at (808) 326-4646, ext. 249, or via email at [brandon.mansur@hawaiicounty.gov](mailto:brandon.mansur@hawaiicounty.gov).

Sincerely,

REED K. MAHUNA  
ACTING POLICE CHIEF

  
THOMAS A. SHOPAY  
ACTING ASSISTANT POLICE CHIEF  
AREA II OPERATIONS

CD/lbm  
2240330

Attachments  
cc: Central Files

RECEIVED  
LAND DIVISION

2024 JUL 12 PM 2:14

DEPT. OF LAND &  
NATURAL RESOURCES  
STATE OF HAWAII

Russell Y. Tsuji, Land Administrator  
Draft Environmental Impact Statement for **Keauhou Bay Management Plan**  
Keauhou, Island of Hawaii; TMK: (3) 7-8-012:Various & (3) 7-8-010:Various  
G70 on behalf of Kamehameha Schools

Transmitted for your review and comment is information on the above-referenced subject matter. The DEIS was published on June 23, 2024, by the State Environmental Review Program (formerly the Office of Environmental Quality Control) at the Office of Planning and Sustainable Development in the periodic bulletin, The Environmental Notice, available at the following link:  
[https://files.hawaii.gov/dbedt/erp/The\\_Environmental\\_Notice/2024-06-23-TEN.pdf](https://files.hawaii.gov/dbedt/erp/The_Environmental_Notice/2024-06-23-TEN.pdf)

Please submit any comments by **August 6, 2024**. If no response is received by this date, we will assume your agency has no comments. Should you have any questions, please contact Darlene Nakamura directly via email at [darlene.k.nakamura@hawaii.gov](mailto:darlene.k.nakamura@hawaii.gov). Thank you.

**BRIEF COMMENTS:**

- We have no objections.
- We have no comments.
- We have no additional comments.
- Comments are included/attached.

Signed: Kul Hui

Print Name: Richard Howard

Division: DOBOL

Date: 7/11/2024

\*Hawaii's County is an Equal Opportunity Provider and Employer.\*



DAVIN S. CHANG  
CHAIRMAN  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSIONER OF LAND AND NATURAL RESOURCE  
MANAGEMENT  
RYAN K.P. KAMAKAOLE  
FIRST DEPUTY

DEAN D. LYENO  
ACTING DEPUTY DIRECTOR - WATER  
MEGHAN L. STATTS  
BOATING AND OCEAN RECREATION

STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'ŌI'HANA KUMUWAIWAI 'ĀINA  
DIVISION OF BOATING AND OCEAN RECREATION

4 SAND ISLAND ACCESS ROAD  
HONOLULU, HAWAII 96819

July 11, 2024

MEMORANDUM

TO: Russell Y. Tsuji, Administrator  
Land Division

FROM: Meghan L. Statts, Administrator  
Division of Boating and Ocean Recreation

SUBJECT: KSBE Keaou Bay Management Plan Draft Environmental Impact Statement

Below please find the Division of Boating and Ocean Recreation ("DOBOR") comments on the Draft Environmental Impact Statement ("DEIS") of the Kamehameha Schools ("KSBE") Keaou Bay Management Plan.

DOBOR appreciates KSBE's plans to develop lands around Keaou Bay to enhance the cultural heritage and community engagement on these properties.

However, DOBOR has concerns about the proposed relocation of boat trailer parking. The DEIS calls for the expansion of the boat trailer parking on KSBE's lands in Vol. I, page 1-15, page 3-35, figure 3-24 & Vol. II, *Preliminary Engineering Report*, page 1-1, while also calling for relocation of existing boat trailer parking from the current location under DOBOR jurisdiction along Kaleiopapa St. (Vol. I, page 1-13).

In previous conversations with KSBE, DOBOR's Administration has made it clear that DOBOR would not be interested in leasing property from KSBE to construct and relocate the boat trailer parking. DOBOR would not object to KSBE expanding and/or relocating boat trailer parking within KSBE property.

In addition to DOBOR's concerns regarding relocating existing boat trailer parking, the new parking area as proposed may not provide adequate room to maneuver vehicles with trailers attached and would be further from the boat ramp than the existing parking area, which may negatively affect boaters' ability to launch and retrieve their boats. DOBOR operates the boat ramp at TMK: (3) 7-8-012:008 and needs to provide trailer parking for recreational boaters. The existing boat trailer parking area located at TMK: (3) 7-8-010:072 is the only DOBOR property capable of accommodating this use.

# **Community Organizations**



## Adventures in Paradise

To Whom It May Concern,

Please read the comments below and ACCEPT Kamehameha Schools (KS) Environment Impact Statement (EIS) for Keauhou Bay to become a Bungalow Resort.

The Bungalow Resort WILL have a Much Needed Positive IMPACT on the Keauhou Bay and does NOT hurt or impair the very healthy Keauhou Bay ocean ecosystem.

Habitat Health at Keauhou Bay:

Please, DO NOT believe the detractors of the development who claim the development will pollute, endanger specie and create greater congestion in the area. The bay is a very resilient body of water with natural ocean wave action keeping the bay clean and healthy for humans, ocean organisms and habitats. The bay over the past 25 years I've worked here, has not shown signs of degradation as would be predicted if what detractors say was true about runoff, pollution and harm to sea turtles and monk seals. The Keauhou Bay is not home to many green sea turtles or monk seals - they are very rare in this bay. Yet resort detractors claim these endangered species will be harmed if the resort built. This is a weak and unsupported claim as anyone who visits the bay knows. This is simply not a regular habitat of either turtles or monk seals and never has been one.

Keauhou Bay is in fact a clean environment where swimmers exercise, tourists and local residents view manta rays and enjoy the bay by kayak, boat and canoe for snorkeling, diving and fishing. The bay waters are circulated hourly with fresh ocean waters and this keeps the bay environment clean and healthy for all things biological. If what the detractors say of this new resort development was true, then we would currently see very sick dolphins, ailing manta rays, polluted monk seals, tumor infested green sea turtles and reduced plankton populations and serious coral issues. But we are not experiencing a decline in species or their health.

Since the Keauhou Bay is already surrounded by all the "problems" currently detractors say will harm the bay then the existing Outrigger resort, numerous condominium complexes, many private residences, a golf course, a biweekly farmers market and marina should have caused all these problems to exist now: But they don't. In fact to the contrary, the bay has proven itself, over time, not to be affected by these "potential problems". The healthy presence of plankton in Keauhou Bay is one more piece of evidence demonstrating the healthy ecosystem found at Keauhou Bay.

The long list of "scientific proofs" provided by some detractors of this development is far from scientific and in most cases rarely even cogent to the discussion of real issues in this resort developments EIS. The reality is Keauhou Bay is blessed with good circulation which mitigates much of the problems that could become harmful if there did not exist a regular circulation of the ocean waters.

Opportunities lost:

Failing to permit Kamehameha Schools (KS) to provide leadership on this development also may ultimately prove a disservice to the Keauhou Bay community. The leadership of Kamehameha Schools has resulted in a resort with lower density rather than a high rise development with double the number of rooms and visitors, as permitted by County planning. KS theoretically could sell the property to another developer that may not hold community interests as high as KS. This reason alone is reason to Support the EIS and the KS Resort Development. Since KS corporate goals are multifaceted there is not the sole goal of financial gain as most developers would hold. KS goals include promote goodwill in the community, education of the public, and encouraging local residents to have pride in their community and history.

I have witnessed first hand, very good leadership decisions made by KS as demonstrated in their resort development plan's low density housing, this EIS in mitigating impacts on the health of the bay, their holding so many community hearings and meetings with stakeholders at the bay in developing their plan for the area.

The Bigger Picture:

This is also not only a resort development plan but also a major change and improvements for the area in adding badly needed infrastructure (streets and traffic flow) to handle existing traffic and to ease congestion. The success of the resort development is part of the funding for the improvements that will benefit the entire local community who utilize the Keauhou Bay for business, leisure and residents. Having worked in this area for many years, the congestion continues to grow and there is no end in sight, except for the resort development and redevelopment of the waterfront and roads by KS.

In Conclusion:

Please support the EIS, KS Resort Development, and redevelopment plans for Keauhou Bay. It's important to be practical and accepting the fact that to build the roads and infrastructure at Keauhou Bay there needs to be a plan that will generate sufficient income to pay for the infrastructure. This is a good blend of low density housing, infrastructure and street improvements paid by income from the KS resort development. As far as I know, money doesn't grow on trees and the roads we need to reduce congestion at Keauhou Bay can be funded through this resort development. Let's get behind this plan and see the vacant land behind the bay developed into a beautiful resort that enhances the Keauhou Bay overall and helps improve everyone's experience visiting the bay with better roads and traffic flow.

**KEAUHOU CANOE CLUB**

P.O. Box 390755

Keaunohu, HI 96739

Email: [ContactKeaunohuCanoeClub@gmail.com](mailto:ContactKeaunohuCanoeClub@gmail.com)

**COMMENTS**

**ON KAMEHAMEHA SCHOOLS' DRAFT ENVIRONMENTAL**

**IMPACT STATEMENT FOR THE KEAUHOU BAY**

**MANAGEMENT PLAN**

**PUBLISHED JUNE 23, 2024**

**A. BACKGROUND**

On June 23, 2024, the Hawai'i Environmental Review Program ("ERP") published the *Draft Environmental Impact Statement* ("DEIS") as submitted by Kamehameha Schools for its Keaunohu Bay Management Plan ("KBMP"). The DEIS comment deadline is August 7, 2024. The DEIS was prepared according to the Hawai'i Environmental Policy Act (HRS 343, "HEPA") and the related Hawai'i Administrative Rules ("HAR") Chapter 11-200.1 (DEIS 1.2 at 1-11).

The Hawai'i Supreme Court has described HEPA as establishing: "a system of environmental review which will ensure that environmental concerns are given appropriate consideration in decision making along with economic and technical considerations." *Kepe 'o v. Watson (Kepe 'o I)*, 87 Haw. 91, 952 P.2d 379 at 388 (1998). (Citation omitted.) The analysis of an EIS is in turn guided by HAR §11-200.1-13 defining 13 "Significance Criteria" to be considered in the analysis of any EIS.

These comments have been formulated by the Keaunohu Canoe Club ("KCC") "KBMP Working Group Committee", a special committee authorized by the KCC Board of Directors. They are submitted on behalf of KCC as authorized by KCC's Board of Directors. Individual KCC members may submit their own comments in their individual capacity. Individual member comments may agree or disagree with or take no position on KCC's comments. Individuals may identify themselves as KCC members, but these are the only official comments of the Keaunohu Canoe Club.

**B. COMMENT SUMMARY**

1) KCC supports the KBMP Proposed Action as it relates to the "long-term operations and maintenance of Keaunohu Bay", the "opportunity to support and revitalize cultural events and traditional practices", and to "preserve and support a range of passive and active recreational activities" (DEIS 2.7 at 2-11), including specifically outrigger canoe paddling and racing.

2) KCC has no comments on development proposed mauka of the Old Kona Road.

Keaunohu Canoe Club  
Comments to KBMP DEIS  
SIGNED (8/5/2024)

1

3) The KBMP could be improved by addressing:

- a) Runoff from Kamehameha III Road and land mauka of the road.
- b) The effect of climate change on near shore infrastructure
- c) Safety on the Bay
- d) A long-term partnership with KCC

**C. PROJECT AREA AND PURPOSES**

The Proposed Project Area is illustrated in DEIS Figure 1-10 at Page 1-18, comprising approximately 29 acres of the approximately 54 acres KS owns adjacent to Keaunohu Bay. The "Purpose and Need" for the Project are described more fully in DEIS Section 2.7 at Page 2-11.

**D. KEAUHOU BAY**

Thousands of people's lives are intertwined with Keaunohu Bay--often for generations--many of whom are among the 700 members of Keaunohu Canoe Club. It is where they have learned to swim, paddle canoes, fish and snorkel in its still relatively vibrant ecosystems. It is also the source of livelihoods for fishermen and several ocean resource tourist businesses with long histories in the Bay.

The DEIS describes Keaunohu Bay as a "small bay along the Kona Coast" (DEIS 1.2 at 1-11). The Bay is the seaward end of both the Keaunohu I and Keaunohu II Ahupua'a. See, DEIS Figure 1-2 at 1-4 ("Ahupua'a Map") (Showing the Keaunohu I and II Ahupua'a boundaries.) A dry stack, stone wall marks the southern boundary of the current KS/KCC lease.

Keaunohu Bay's lengthy history is "entwined with generations of Hawaiian royalty" beginning with 'Umiāfihoa (also 'Umi-a-Lihoa) (DEIS 2.3 at 2-2.) See also, S. M. KAMAKAU, *RULING CHIEFS OF HAWAII REVISED EDITION*, Kamehameha School Press, Honolulu (1992), Chapter 1, "The Story of 'Umi." It is also the birthplace of Kauikeaouli (Kamehameha III), who was stillborn and brought to life on Keaunohu's shore. (DEIS 2.3 at 2-2 & 2-3.)

Prominent Ali'i lived around the bay and used it from the days of 'Umi until the late 19<sup>th</sup> Century. (DEIS 2.3 at 2-2 thru 2-5 and 4.1.1 at 4-6.) During the 1848 Māhele 'Āina the Keaunohu Ahupua'a was divided in two. Victoria Kamāmalu and Lot Kapuāiwa were awarded the newly created Keaunohu I and Keaunohu 2 Ahupua'a, respectively. Lot Kapuāiwa would go on to become King Kamehameha V. See, DEIS 4.1.1 at 4-7, and Appendix C, *AMS Cultural Impact Assessment for Kamehameha Schools' Keaunohu Bay Management Plan* at 39.

Keaunohu Canoe Club  
Comments to KBMP DEIS  
SIGNED (8/5/2024)

2

#### E. KAMEHAMEHA SCHOOLS (“KS”)

Kamehameha Schools is forever linked to the vast land legacy of Princess Kamehameha I. Bernice Pauahi Bishop (Āina Pauahi), the great granddaughter of Kamehameha I. Her legacy of some 375,000 acres of land helped establish Kamehameha Schools “forever linking the institution with its ancestral lineage [and the] responsibility to steward these lands.” (DEIS 2.1 at 2-1). The KS mission is to “create educational opportunities in perpetuity to improve the capability and well-being of people of Hawaiian ancestry. . . . [and] to improve the well-being of āina (land) and the lāhui (Hawaiian people) within one generation.” KS “as the haku āina (proprietors of the land), has an obligation to care for these legacy lands [in order to foster the] relationship between kānaka (humans) and āina [as well as] their long range economic vitality.” To fulfill this mission, KS wants to “utilize its landholdings and resources to achieve a balanced state between educational, cultural, environmental, economic and community returns.” (DEIS 2.2 at 2-2.)

#### F. KEAHOHU CANOE CLUB (“KCC”)

Louis K. and Mary Jane Kahanamoku formed KCC in 1980 (DEIS 4.1.1 at 4-23 and 4.10 at 4-115.) Other founders included Sam A. Kahanamoku, Herb Kane, Kelly Greenwell and other leaders in the Keaouhou outrigger canoe racing community. See, 1980 KCC original Articles of Incorporation filed of record on October 20, 1980, as “Honokohau Canoe Club” (should be “Honokōhau”). The KBMP DEIS recognizes that:

The traditional cultural practice of outrigger canoe paddling is actively practiced, as embodied by the core of native Hawaiian instructors with the Keaouhou Canoe Club and perpetuating the vision of its founders (Louis and Mary Jane Kahanamoku). The club strives to educate youth, club members, and the community at large about Hawaiian culture, values, and traditions associated with Hawaiian outrigger canoeing. (DEIS 4.1.1 at 4-23.)

KCC appreciates this description. It is consistent with KCC’s purposes described in its 1980 Articles of Incorporation, which state in pertinent part that KCC’s purposes are to:

*Engage in, promote, encourage participation in and provide education and instruction in Hawaiian and Polynesian culture through canoeing and other related activities. To encourage participation in civic and community activities within the club membership. Promote competitive inter-club and inter-island and international Hawaiian outrigger racing. Foster, encourage and promote interest in the sport of and science of canoe racing and canoeing in the entire State of Hawaii. (Emphasis added.)*

#### G. KCC’S INTEREST IN THE PROJECT

KCC and KS share a common interest in the preservation of Keaouhou Bay, the adjacent āina and its unique heritage and the cultural practices associated with that heritage. Outrigger canoe paddling and racing are prominent features of those practices and that heritage. KCC’s shared interest also includes the education of KCC’s adult, youth, and keiki members in Hawaiian history and culture, specifically as it relates to Keaouhou Bay and the nearby āina. KCC also supports the KBMP as it relates to the management of Keaouhou Bay and its surrounding āina to prevent conflicts and enhance enjoyment among the users of Keaouhou Bay. KCC is motivated and would be grateful to be an active participant in that effort.

#### H. COMMENT SUMMARY

KCC is concerned, however, that the DEIS does not adequately address four significant issues, some of which could undercut or nullify the other benefits of the KBMP. The first relates to storm water runoff, which the DEIS concludes is not an issue because it has not been reported to the County or DOT. (See, DEIS 4.5 at 4-81.) The second relates to infrastructure, specifically the relocation of the existing near shore water and sewer infrastructure and associated electrical and telecommunications lines. Ongoing and future climate change is likely to result in flooding and breaching of this infrastructure with catastrophic consequences to all the good that KS hopes to accomplish. The third significant issue not addressed in the DEIS is the safety and ongoing traditional use of Keaouhou Bay by the lāhui and other local residents due to the unregulated increase of motorized vessels using Keaouhou Bay. The fourth is how the plan might affect KCC’s practical operations and the potential for KCC playing a supporting role in the implementation of the KBMP.

#### I. DISCUSSION

KCC’s Comments are aligned with the Sections and pages of the DEIS to which they pertain.

#### 4.5 Groundwater, Surface Water, and Drainage at 4-77

The DEIS description of “Storm Water Runoff, Drainage” (DEIS 4.5 at 4-81) does not correspond with KCC’s members’ observations of these events. In any heavy rainfall there is significant unregulated drainage both on the KCC leased grounds and into Keaouhou Bay. The runoff onto the grounds is sufficient to wash gravel down from the Old Kona Road onto KCC’s leased lands. More significant is the runoff that flows down Kamehameha III Road and pools in the cul-de-sac—often for days. (Photo #1 below). At times it overflows the cul-de-sac and leaves a sludge in the bay (Photo #2 below).

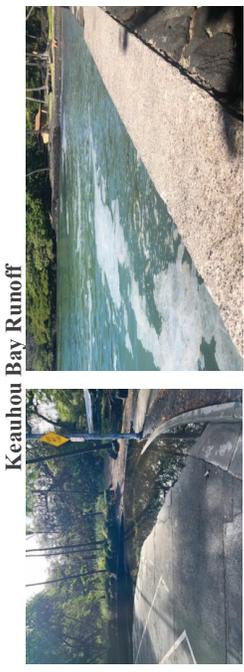
The KBMP acknowledges that “a select portion” of the Project Area may experience passive flooding caused by sea level rise (“SLR”). (DEIS 4.16.5 at 4-180, “Adverse Environmental Effects that Cannot be Avoided”) The DEIS should acknowledge that SLR will affect the Ka`i`i linehe Recreation Corridor and in particular the water, wastewater, power and telecommunications infrastructure that are now located in the corridor.

**4.10 Recreation at 4-114**  
 The DEIS concludes that: “The Project will not significantly impact the availability of recreation opportunities in the Kona District.” This may be true except for the potential of increased motorized small boat and other motorized marine recreation equipment, such as ski-dos and motorized paddle boards on the waters of the bay. Unlike the larger vessels moored in the bay, these Vessels Moored Elsewhere (“VME”) are often operated by less experienced individuals and can move at high speeds. Both of which pose hazards to those operating without motors in this admittedly “small” bay. (DEIS 1.2 at 1-11). These include not only outrigger canoe paddlers, but also swimmers, snorkelers, scuba divers, fishermen, honu, nai a, hāhālua, and `ilio holo i ka uaua.

Sometimes KCC can put as many as 10 hulls on the water, and on race days it’s considerably more. Our practices include keiki between 8 and 11 years old and youth up to 18 years of age. KCC steersmen and coaches report being surprised by fast moving, motor vessels, some of whom do not observe the “no wake” zone in the bay. A collision with a motorboat could be especially tragic for these young paddlers and their families.

The DEIS understandably focuses on the KBMP, which is primarily a plan to develop, manage and maintain KS uplands in the vicinity of Keauhou Bay—not the waters of the bay itself. Yet some (perhaps much) of what is done on the uplands surrounding the bay can affect those who use the waters of the bay. The potential infrastructure issues discussed below are among those.

So are the adverse effects of adding 15 more onshore parking spaces to accommodate trailers for motorized VMEs. See, DEIS 3.2.5 at 3-78, Table 3.2 at 3-79, and Fig. 3-64 at 3-81. (Describing 7 new boat trailer parking spaces in the current boatyard on the north end of the Project Area) and Fig. 3-65 at 3-82 (Describing plans for 8 more on the south end of the Project Area.) Before allowing more parking of VME trailers, the DEIS should examine the potential safety issues arising out of allowing more motorized VMEs unlimited access to Keauhou Bay and the conflicts that poses to traditional, non-motorized uses of this confined bay.



**Photo #1 Cul-de-Sac (July 31, 2024)**  
**Photo #2 Ka`i`i linehe Corridor Wall (December 4, 2020)**

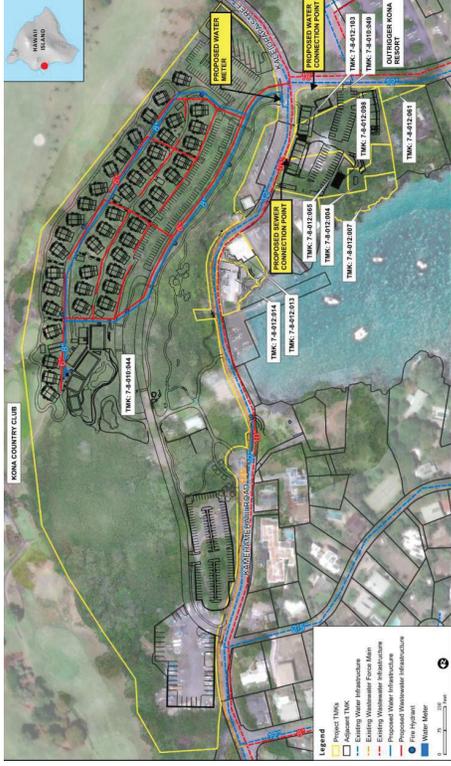
The mitigation measures discussed at DEIS at 4-85 & 86 do not account for this level of runoff, much less its effect on Keauhou Bay. More effective mitigation measures are needed, and the construction phase of this Project is an ideal time to implement them.

**4.7 Natural Hazards at 4-107**  
**4.7.6 Climate Change and Sea Level Rise**  
 The EIS acknowledges that a significant amount of sea level rise is expected in the project area and plans for up to 3.2 feet by 2100. See, DEIS 4.7.6 “Climate Change and Sea Level Rise” at 4-107. “The primary means of mitigation for the KBMP is avoidance.” *Id.* “Potential Impacts and Mitigation Measures” at 4-109. As discussed below (DEIS 4.12 “Infrastructure and Utilities”), the water and sewer infrastructure along with telecommunications and electrical lines are located in the Ka`i`i linehe Recreation Corridor, buried behind the old seawall in the center of the photo below. See, Fig. 3-13 at 3-19.



**Figure 3-13 Ka`i`i linehe Recreation Corridor**  
 Keauhou Canoe Club  
 Comments to KBMP DEIS  
 SIGNED (8/5/2024) 5

**4.12 Infrastructure and Utilities**



**Figure 4-43 at 4-139 "Water & Wastewater Infrastructure Map"**

**4.12.1 Water Supply** at 4-136  
 The existing water main that will supply the Project passes through the near shore area. (See, Dashed blue line in Fig. 4-43 above.) The EIS acknowledges that this area will be impacted by SLR but does not propose any future action. A potable water main break will have minimal effect on the bay but would severely affect all of the tenants and users of the bay. This main has broken in the past. This risk could be mitigated by relocating the water main to the Old Kona Road.

**4.12.2 Wastewater Treatment and Disposal** at 4-142  
 A wastewater force main and other wastewater infrastructure also pass through the near shore area. (See, Dashed orange (force main) and red (other infrastructure) lines in Fig. 4-43 above.) The EIS acknowledges that this area will be affected by SLR but does not propose any future action other than increasing the amount of sewage that will be flowing through the sewer line. (See, DEIS 4.12.2 at 4-142.) A SLR induced wastewater line break in this area is predictable. It will have a devastating impact on the bay and will severely affect all of the tenants and users of the bay—perhaps shutting down the commercial operations for months. The potential liability is likely to be substantial. In the recent past the wastewater force main has been exposed by high surf events. This risk should be mitigated (in fact avoided) by relocating the wastewater force main and other wastewater infrastructure to the Old Kona Road.

**4.12.4 Power and Telecommunications** at 4-144

Electrical and Telecommunications lines also pass through the near shore area. The EIS acknowledges that this area will be affected by SLR but does not propose moving these lines. This risk should be totally mitigated by relocating the electrical and telecommunications lines to the Old Kona Road.

**4.12.6 Beach Restoration (New)**

The existing rock seawall between the two shoreline access points in the Ka'i'i Ilihehe Recreation Corridor (Figure 3-13 above) is in poor condition, and the makai side is continually eroded in high surf events. If the water, wastewater, power, and telecommunications lines running behind the wall are relocated to a safer and more resilient location along Old Kona Road then this wall might be removed. The shoreline could then be restored as the beach that existed prior to the wall being built. This would likely be more resilient and provide an improved amenity for bay users. It would also be a step toward recovering what Keauhou Bay used to be for the whole community.

**4.16 Probable Impacts and Other Considerations**

**Under HAR II-200.1**

**4.16.1 Cumulative Impacts** at 4-176

As already discussed, the potential for increased conflict between motorized and non-motorized use of the bay is a cumulative impact that the DEIS should more fully consider before increasing the parking areas for VMEs.

**4.16.5 Adverse Environmental Effects that Cannot be Avoided** at 4-180  
 This section states "Upon completion of the Project environmental accidents are not anticipated, however if an environmental accident is to occur, DOH will be notified immediately." When the wastewater force main breaks it will be too late for DOH to do anything to save the bay. The EIS has acknowledged a 3.2ft. sea level rise. These are predictable adverse effects that can be avoided by moving wastewater infrastructure further from the shoreline. Reconstruction of the Old Kona Road seems like an ideal and more cost-effective time to undertake this important mitigation instead of in response to a predictable environmental disaster.

**4.17 Unresolved Issues** at 4-180

**Keauhou Canoe Club Specific Issues**

KCC would like to explore ways in which it might have a supporting role to play in the implementation of the KPMB. Figure 3-35 below at 3-36 of the DEIS is a comprehensive rendering of the Project Area illustrating the approximate location of KCC's hālau, boat racks, and canoes. The hālau is the sizable blue rectangle mauka of the bay in a green field with a proposed expansion area adjacent to the

northeast. The existing boat racks are sketched at the rear of the hālau, and canoes are sketched makai and downslope from the hālau near the bay.



**Figure 3-35 Proposed Keaouhou Bay Improvement Plan (2023) at 3-36**

Keaouhou Canoe Club is grateful for being included in the KBMP. KCC also knows that Kamehameha Schools has put extraordinary thought, effort and expense into producing the KBMP and the DEIS. We also express our appreciation for the several ways in which the DEIS recognizes the role KCC has played in the life of Keaouhou Bay.

We do have the following specific questions; although, they are not raised by the EIS. The KCC KBMP Working Group Committee would be very grateful for an opportunity to meet with KS to discuss the following questions and others that may arise.

- 1) Are there ways in which KCC might more actively promote the KBMP goals in closer cooperation with KS?
- 2) How will increased tourist activity and reconfiguration of KCC's footprint affect KCC's access to the bay?
- 3) How will the KBMP affect race practices, other training, canoe races, and use of the imu for club gatherings and pā'ina?

**4) Operational Matters**

- a) Will the KCC hālau remain where it is, or will it have to be moved?
- b) Will KCC be required to construct a "compliant" hālau structure?
- c) Will KCC have access to a secure place on site to store and repair canoes?

These Comments may be signed and submitted electronically and as originals or copies, which shall all be treated the same as originals.

**RESPECTFULLY SUBMITTED  
KEAOUHOU CANOE CLUB**

  
Peter Lasich, President

Dated: August 5, 2024

  
Carolyn Leilani Carter, Chair  
KCC KBMP Working Group Committee

**cc: KCC KBMP Working Group Committee**

- Vern Bieraugel, KCC Treasurer
- Carolyn Carter, KCC Membership Secretary
- David Case, Culture Committee Member
- Jessie Chambers, Culture Committee Member
- Moke Hauanio, Kupuna Coach
- Peter Lasich, KCC Board President
- Meredith Orzbil, KCC Board Member
- Shaun Roth, KBMP Committee Member
- Jody Wheeler, KCC Board Member
- Amber Yoderian, Youth Coach & KCC Board Member
- Nue Yoderian, Athletic Director & KCC Board Member

## Manta Pacific Research Foundation

Aloha, I am writing to express my support for the Keauhou Bay Management Plan and the draft EIS. I have been scuba diving at Keauhou since I logged my first manta ray night dive on August 13, 1985. In the intervening 38 years, and over 14,500 logged scuba dives, I've seen very few improvements to the infrastructure surrounding the bay despite a giant increase in the recreational and commercial use of the bay. I have been fortunate to see the Kamehameha presentation of their proposed plans to improve the shore facilities twice. They display a commitment to improving the area culturally, structurally, recreationally and commercially. I think they seem to have a good plan to greatly improve the land around Keauhou Bay for the community, the environment and Kamehameha schools. Please advance the proposed improvements to Keauhou Bay. Thank you.  
Sincerely Keller Laros Chair Manta Pacific Research Foundation

---

### Cody Winchester

**From:** Keller Laros <kellerlaros@gmail.com>  
**Sent:** Thursday, July 25, 2024 6:19 PM  
**To:** 221053-01 KS Keauhou Entitlements  
**Cc:** Manta Pacific  
**Subject:** Support for Keauhou Bay Management Plan EIS  
**Categories:** Yellow Category

Aloha,  
I am writing to express my support for the Keauhou Bay Management Plan and the draft EIS. I have been scuba diving at Keauhou since I logged my first manta ray night dive on August 13, 1985. In the intervening 38 years, and over 14,500 logged scuba dives, I've seen very few improvements to the infrastructure surrounding the bay despite a giant increase in the recreational and commercial use of the bay. I have been fortunate to see the Kamehameha presentation of their proposed plans to improve the shore facilities twice. They display a commitment to improving the area culturally, structurally, recreationally and commercially. I think they seem to have a good plan to greatly improve the land around Keauhou Bay for the community, the environment and Kamehameha schools.  
Please advance the proposed improvements to Keauhou Bay.  
Thank you.

Sincerely  
Keller Laros  
Chair  
Manta Pacific Research  
Foundation  
808-895-1791

Sent from my iPhone

## Moku Loa (Hawaii Island) Group, Sierra Club

---

### Cody Winchester

**From:** ptanok12@gmail.com on behalf of Moku Loa Hawaii Island Sierra Club  
<hawaiiislandsierraclub@gmail.com>  
**Sent:** Wednesday, August 7, 2024 9:55 PM  
**To:** 221053-01 KS Keauhou Entitlements; Alex.Roy@hawaiicounty.gov  
**Subject:** KS, Keauhou Bay Management Plan DEIS comments  
**Attachments:** KSMP DEIS comments, 8-7-24.docx

**Categories:** Yellow Category

Aloha,  
Please see attached.  
Mahalo

---

### Moku Loa (Hawaii Island) Group, Sierra Club

*We work hard to advance Sierra Clubs' mission to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; to educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives.*



August 7, 2024

Mr. Alex Roy  
c/o Hawaii County Planning Department  
101 Aupuni St  
Hilo HI 96704

G70 International, Inc.  
111 S King St  
Suite 170  
Honolulu HI 96813  
KeaouhBay@g70.design

Re: Comments on Kamehameha Schools, Keaouh Bay Management Plan, Draft Environmental Impact Statement

Aloha,

The Sierra Club of Hawaii, Hawaii Island Group is providing comments on the applicant's Draft Environmental Impact Statement.

#### Summary

Keaouh Bay is one of seven royal centers located on the Kona coast and, therefore, one of the most historically and culturally significant wahi pana in the state of Hawaii.

The applicant acquired the properties associated with this DEIS in 1887. In the ensuing years until the present time, an immense amount of damage and destruction has occurred to the historic, cultural, and environmental resources of this wahi pana. The kanaka maoli 'ohana of this ahupua'a have suffered great harm and disenfranchisement from this 'aina and the traditional and customary practices developed over several centuries.

For instance, the DEIS states: "Beginning in the 1960s to current, residential, resort, golf-course, and other tourist-related development in the Keaouh area have drastically changed the landscape. Additionally, other key events such as the Kuleana Acquisition Program initiated in 1964 by Kamehameha Schools predecessors resulted in the unfortunate displacement of Native Hawaiian families from Keaouh Bay".

Because of the cultural significance of this wahi pana and the history of damage, harm, and destruction that has been inflicted upon it as a result of prior tourism-related development and other past actions, the management strategies related to the perpetuation of tourism-related development are inappropriate.

The DEIS states, "The EIS will consider four alternatives to the Proposed Action:

1. No-Action Alternative
2. Higher Density Development Alternative (also known as Highest and Best Use (HBU))
3. Housing Alternative
4. Conveyance Alternative"

None of these four alternatives are appropriate, given the history of and existing conditions on and around this wahi pana.

The most appropriate proposed action would be one which perpetuates ho'oponopono between the past, the present, and the future.

Such a proposed action would:

- 1) remove tourism-related development strategies,
- 2) remove economics as a primary evaluation criteria, and
- 3) change the paradigm of this wahi pana being a commercial property to a center for cultural restoration and perpetuation.

Please respect and honor the memory and mana'o of kupuna Lily Makuahine Namakaokaia Haatio Kong: <https://vimeo.com/manage/videos/994680462/privacy>

#### DEIS

##### "2.6 Key Issues and Concerns

The following critical issues were identified between 2016 and 2019 during the planning process for the KBMP and are further described in this section: 1. The integrity of natural and cultural resources is threatened in the absence of a long-term comprehensive management plan. 2.

Kamehameha Schools properties at Keaouh Bay are underperforming economically. 3. Incompatible uses at the bayfront create conflicts between users and disrespect for wahi pana. 4. Kamehameha Schools lands at Keaouh Bay are underutilized for educational programming. 5. Existing circulation patterns create congestion and safety concerns.

2.6.2 Lands are Underperforming Economically. The Kamehameha Schools properties are prime properties that could generate significant revenues from appropriate development to support the management of Kamehameha Schools assets and provide long-term economic returns. However, these lands are currently underutilized, and do not yield equitable returns or market-based rent revenues for the organization. A key component of the plan is to ensure its economic sustainability. Revenue generated from commercial lease rent will be redirected to support the KBMP's desired educational and cultural resource management priorities.

## 2.8 Evaluation Criteria

2. Develop revenue generation opportunities that are appropriate in scale, function, and location and that align with the overall focus on the history of the bay.”

### Comment

While economic sustainability is essential to the applicant and the applicant has been very successful in increasing economic health and well-being, the most appropriate redevelopment actions for the wahi pana under the ownership and management of the applicant are ones in which restoration, preservation, and perpetuation of culture are the primary strategy.

### DEIS

#### 3.1.1 Kamohoali'i

The Kamohoali'i Zone (Figure 3-5) gets its name from a historic heiau that was once found at the bayfront. Although the heiau is no longer extant, Kamohoali'i continues to be a place of ceremonial and spiritual use. Ceremonial use is primarily associated with the birth of Kauhikaouli in 1814. His birth was honored with the construction of one (possibly two) heiau and the largest hōlua in the Hawaiian Islands, Hōlua Kāneaka. Commemoration of Kauhikaouli's birth is carried out at his birth place, recognized officially as a historic site (Figure 3-3). Multiple versions of his birth story indicate that the birth of Kauhikaouli, from the time Queen Ke'ōpūlani went into labor to the time she gave birth and until the infant was resuscitated by a kahuna, occurred in the vicinity of the birthstone site. In addition to the birthstone, the Kamohoali'i zone includes other significant cultural features such as Kūhalalua/Kaopa Spring, Ho'okūkū Pond, the cliff walls of 'Ahu'ula, as well as amenities such as the lānai and platform adjacent to the spring where the infant Kauhikaouli was cared for following his revival.

#### 3.1.2 Kāmau'ai

The Kāmau'ai Zone (Figure 3-9) gets its name from a traditional heiau, Kāmau'ai that is believed to have been located at the top of the 'Ahu'ula cliff (Figure 3-10). The heiau was associated with the akua Kane and his introduction of food plants to the region. The heiau is no longer extant, however the place name has endured as well as the cultural understanding that certain places continued to hold mana (ancestral power). The name is used as the physical boundary between Keauhōu 1 and Keauhōu 2 āhupua'a. The place name 'Ahu'ula refers to the feather cloaks worn by the ali'i and to the strict kapu enforced in the vicinity of 'Ahu'ula Cliff, which was reserved only for the ali'i and their retainers who resided there. As a chief of the highest rank, such as Ke'ōpūlani, commoners could not be caught in the path of her shadow due to certain kapu. During the morning when the sun cast a shadow seaward towards the pali of 'Ahu'ula, travelers were directed to swim across Keauhōu Bay. In the afternoon, when shadows fell inland, travelers could pass the area on foot, as long as they kept a respectful distance behind the pali. The Kāmau'ai Zone encompasses the land atop the 'Ahu'ula cliff to Old Kona Road, a private road owned by Kamehameha Schools, that travels north to south. Though full of scrub vegetation today, this area afforded more open panoramic views in the mauka and makai directions. The terrain is near 50 ft. elevation and is undulating and slopes gently toward the ocean. During the Māhele, there was at least one kuleana house lot on the topside cliff, and archaeological remains suggest there may have been more. The house lots were defined by rock

walls and had “kuleana vegetation.” Kuleana vegetation refers to vegetation that was documented growing within house lots at Keauhōu Bay in the mid-1800s. Kuleana vegetation can include trees known to have been planted as useful household vegetation such as niu (Cocos nucifera), kou (Cordia subcordata), loulu (Pritchardia spp.), hala (Pandanus tectorius), hau (Hibiscus tiliaceus), and noni (Morinda citrifolia). Remnants of house foundations and walls from these house lots were disturbed during construction of the golf course mauka of the Old Kona Road.

#### 3.1.3 Ka'ili'i'ilinehe

The Ka'ili'i'ilinehe Zone (Figure 3-11) takes its name from the Ka'ili'i'ilinehe Beach that is nestled into the head of the bay. Traditionally, Keauhōu Bay was known for its 'ili'i (pebbles) that roll with the motion of the waves. As such the famed saying “ka'ili'i'ilinehe o Keauhōu” or “inhe 'ili'i o Keauhōu” translated roughly as the rustling pebbles of Keauhōu was used as a term of endearment to refer to Keauhōu's youth (Kahoiwai 1888; Kalawaiapūma 1888).

Ka'ili'i'ilinehe Beach once extended along the entire bayfront. What remains today is a small remnant of that early natural pebbled beach as portions of the shoreline have been hardened with seawalls, wharf, and piers (Figure 3-12 and Figure 3-13).

Adjacent to the sandy beach area today is Ka'ili'i'ilinehe Beach Park, a privately Kamehameha Schools managed and maintained park with picnic tables, barbecue pits, and a comfort station for public use. The Ka'ili'i'ilinehe zone is also home to the Keauhōu Canoe Club, who entered a lease agreement with Kamehameha Schools for the use of the area for their club operations and canoe storage (Figure 3-14). The club has an open-air wooden pavilion for storing canoes and holding special events. Access to the pavilion is via the Old Kona Road from the north via Kamehameha III Road to an unimproved parking area. A portion of this zone is also used for volleyball activities by various users (Figure 3-15).

#### 3.1.4 Kaimukī

The Kaimukī Zone (Figure 3-16 and Figure 3-17) is named for a pit known as Kaimukī. Kaimukī translates to “the oven for ti root”. This area was known as the birth site of the celebrated medical kahuna Kamali'ikane, of the class that skillfully diagnose by feeling over the body (kahuna hāhā).

The Kaimukī Zone is a 2.72-acre area bordered on the east by Kaleiopapa Road and on the south by 'Ehukai Street (Figure 3-16). The western portion of the parcel has been bulldozed and is currently occupied by Adventures in Paradise as a storage facility. The southeastern corner of the parcel contains a maintained lawn planted with coconut trees and a large, mortared stone foundation for a welcoming sign to the hotel and the bay.

#### 3.1.5 Kāneaka

The Kāneaka Zone (Figure 3-18, 3-19, and 3-20) takes its name from the Hōlua Kāneaka Slide. He'e hōlua, or land sledging, was a favorite sport of the ali'i. It was typically performed on the slope of a hill over a course either laid out on the ground or artificially built up. The course was covered with stalks of pili grass stripped of the blade and laid evenly and then lubricated with kukui (Aleurites moluccanus) oil. Midday was the favorite time for the sport when the heat of the

sun made the grass slippery, and the sled could then attain terrific speed. The Hōlua Kāneaka Slide at Keaouhou is the largest and best-preserved slide in the State of Hawai'i. The hōlua slopes downward for approximately 1,300 ft., from the top of a hill and terminates at Ali'i Highway. Although there is no evidence of the Hōlua Kāneaka within the Project Area today, archeologists estimate the hōlua once spanned 4,000 ft. and traversed the Kāneaka Zone to deposit riders into He'ia or Keaouhou Bay. The Kāneaka Zone is bordered by the Kona County Club in the mauka direction and the Old Kona Road in the makai direction. An approximately 11,040 sf. portion of the golf course's greens encroach onto Kamehameha Schools property at the mauka most portion of this zone (Figure 3-1). The Old Kona Road at one time provided a thoroughfare across the bay. Presently, only the northern portion of the road is in use and access is managed by the Keaouhou Canoe Club (Figure 3-21). The southern portion of the road has essentially been abandoned and overgrown with vegetation (Figure 3-22). Portions of the Kāneaka Zone have been previously disturbed by the construction of the Kona County Club's golf course which was constructed in 1966. The area today is primarily dominated by invasive guinea grass (*Megathyrsus maximus*) and koa haole (*Leucaena leucocephala*) (Figure 3-23). A portion of the historic Kau Cemetery was also once located in the Kāneaka Zone to the north of the hōlua alignment. No evidence of this cemetery remains today. The burials may have been relocated during the 1964 Kuleana Acquisition Program in which Native Hawaiians were displaced and burials relocated. The cemetery may also have been relocated as part of the golf course construction. At the northern end of the Kāneaka Zone is an existing approximately 14,500 sf. unimproved parking lot used for boat trailer storage and visitor parking (Figure 3-24). Kamehameha Schools has entered a license agreement with a commercial tenant who manages this lot and charges a fee for boat storage/parking use."

**Comment:**

The description of these zones contain a litany of damage and destruction, much of it occurring after plan approvals that were opposed by lineal and cultural descendants. This supports a proposed action in which the true nature of these properties as a wahi pana is recognized and additional tourism-related development does not occur is the most appropriate one.

**DEIS**

"Specific planning strategies and key targeted actions were developed that ultimately provided the decision-making framework that guided the completion of the KBMP. The KBMP is organized into five (5) primary Management Strategies as presented below:

1. Establish a Heritage Management Corridor • Relocate existing commercial activities fronting the birth site and repurpose existing facilities for cultural and educational activities. • Protect cultural lines of sight and view planes from the birth site area and 'Ahu'ula Cliff. • Continue a walking path to extend from the current birth site area towards Mo'ikeha Cave. • Maintain a buffer and open space corridor within the alignment of Kāneaka Hōlua path.
2. ~~Reposition and Development of New~~ Commercial Bayfront Areas & ~~Appropriate Density~~ • Develop several low-rise buildings to encompass a total of approximately 14,000 SF retail/dining space to accommodate the relocation of commercial operators from the bay front area, possible complementary retail uses, and potentially allow space for existing ocean recreation operators who currently do not have a physical presence or

official check-in location at the bay. • Address the opportunity gap within Kona's existing visitor accommodation inventory through the provision of an appropriately defined density for a low-impact lodging on the upper mauka plateau of 'Ahu'ula Cliff. Reorient Recreational and Community Use • Reorient the area of use by the Keaouhou Canoe Club to re-organize the extent of formal and informal recreational uses of the area. • Establish a new 200-foot-wide open space corridor running mauka-makai from the Old Kona Road and upper 'Ahu'ula Cliff overhang to the beach front. • Expand the Ka'ili'ilinche Beach Park to connect to the mauka-makai corridor. • Provide improved parking for recreational users north of Kamehameha III Road. • Maintain passive open space along the top of the 'Ahu'ula Cliff plateau by establishing a pedestrian promenade along the Old Kona Road. • Establish a future community use area adjacent to Keaouhou Canoe Club. • Improve shoreline access for cultural and recreational activities. • Create a greater sense of inclusivity at the bayfront.

4. Maintain Existing and Establish New Place-Based Cultural Educational Areas • Repurpose the existing buildings adjacent to the birth site area to become a part of a cultural learning center and heritage center. Keaouhou Bay Management Plan Draft Environmental Impact Statement 1-15
5. Manage Vehicle, Boat and Pedestrian Circulation Through the Bayfront Village • Provide improved parking areas for recreational users, local residents, and area visitors with clear points of access. • Revitalize Old Kona Road to relieve congestion at the bayfront and provide a north-south connection. • Seek to collaborate with State Department of Land and Natural Resources (DLNR) Division of Boating and Ocean Recreation (DOBOR) to consider additional boat-trailer parking during active use. • Consider an agreement with DOBOR and Hawai'i County to manage vehicle loading and unloading activities at the pier and adjacent facilities. • Create new wayfinding throughout the area, inclusive of landscaping, signage, reflection points and an entry feature.

All five Management Strategies must operate in tandem for the KBMP to be holistically successful. Accordingly, the Proposed Action is defined as the implementation of the five Management Strategies at Keaouhou Bay."

**Comment:**

The most appropriate proposed action would remove the stuck-through language from the five Management Strategies.

**Comment:**

The DEIS, Volumes I&II contain numerous descriptions of sites that have been destroyed or damaged over the years, many of them fairly recently. A comprehensive list of sites that have been destroyed and their location should be presented in the DEIS. The circumstances that resulted in the destruction and/or damage should be presented. For instance, Site 1660 location of Site 1660 is not listed in Vol. I. The date and circumstances surrounding the destruction of the Kamau'ai Heiau are not presented.

Comment:

In 2009, the State Historic Preservation Board refused to delist the Pua'u II complex in Wai'alea from the state and National Register of Historic Places because it still existed based upon Hawaiian cultural beliefs. This determination provides further justification for this wahi pana to be redeveloped and restored in a manner consistent with the traditional and customary practices associated with this wahi pana.

DEIS Volume II, Appendices

Comment:

There is no Table of Contents for Volume II.. Users must "seek-and-find" the Appendix.

Comment:

Appendix A, EISPN Scoping Meeting Minutes, 4/12/22:  
Summary does not include whether or participant was cultural/lineal descendant. Does not include comments opposing resort hotel for cultural/historic reasons.

Comment:

Appendix B= EISPN Comment Letters:

No summary listing of comment letters

No page numbers.

No determination of whether commenters are cultural/lineal descendant.

Comment:

Appendix C, Cultural Impact Assessment, April 2022 (Revised November 2022):  
CIA only contains four interviews. The CIA consultant outreach effort only met minimal requirements for public notice and outreach. CIA consultant did not reach out to individuals and organizations that participated in 4/12/22 EISPN Scoping Meeting and/or submitted EISPN comment letters prior to the CIA's publication in November 2022 who identified themselves in as being parties related to the project as cultural/lineal descendants or traditional and customary practitioners.

DEIS Appendix C, p. 95, "Between July and September of 2022, SWCA Environmental Consultants completed the fieldwork for a supplemental archaeological inventory survey (Reeve 2022) for Land Area 6, comprised of seven TMKs: (3) 7-8- 010:049, (3) 7-8-12:004, 007, 061, 065, 098, and 103 and makes up the westernmost section of the project area (see Figure 62). A portion of their survey area was previously investigated by Haun and Henry (2005b) who documented two sites, Site 24215, a modified overhang and Site 24216, a historic habitation complex. As a result of SWCA'S fieldwork, Site 24215 was not relocated due to a dense ground cover of night blooming cereus and only four of the five features originally associated with Site 24216 was relocated. **Reeve (2022) concluded that the unlocated feature was likely destroyed**

**from recent bulldozing activities.** Furthermore, Reeve (2022) found that Site 24216 forms part of a larger historic residential complex and recorded six additional sites, which they assigned temporary site numbers. The newly recorded sites include a property boundary wall (Keaouhou-001), a historic cement slab foundation (Keaouhou-002), baitcups (Keaouhou-003), a platform and wall (Keaouhou-005), another cement slab foundation likely associated with habitation or commercial activities (Keaouhou0006), and another property boundary wall (Keaouhou007). Two test units were also excavated in which marine shell midden, lithic debitage, small waterworn pebbles, modern debris, historic glass, ceramic artifacts, and volcanic glass fragments were recovered. Detailed analysis and report finalization has yet to be completed."

Comment:

This site was destroyed "from recent bulldozing activities". Did the applicant submit a permit for this activity? If not, has the applicant taken action against the bulldozer operator? The destruction of this site and many others provides further support for a proposed action that ho'oponopono the destruction in this wahi pana..

DEIS, Appendix C, p. 97-"Their study resulted in the identification of three newly identified sites (Sites 1608.1, 1608.2, and 1608.3; all identified during the 2021 fieldwork), the relocation of three preservation sites (Sites 4348, 24263, and 24264), and two of three data recovery sites (Sites 24261 and 24266). The third data recovery site (Site 5674) was not relocated due to dense and impenetrable vegetation. The location of these sites are shown above in Haun et al. (2021) site location map (see Figure 66). Site 1608.1 and 1608.2 were preliminarily interpreted as historic habitations with associated features and Site 1608.3 as a historic cattle wall. Haun et al. (2022:55) found these sites to be in poor condition and tentatively assessed them as significant under Criterion d and noted the "following [AIS-level] documentation these sites will likely be recommended for no further work. Site 4348 (Kauikeaouli Birth Stone), Site 24263 (Ho'okūkū Pond), and Site 24264 (Mo'ikeha Cave) were previously recommended for preservation by Haun and Henry (2005a). All three sites were considered significant under Criteria d, and e; Site 4348 was also considered significant under Criterion b and Site 24263 under Criterion c. Site 24261 and 24266 were recommended for data recovery by Haun and Henry (2005a), found to be in fair condition and were assessed as significant under Criterion d. **Although the third data recovery site (Site 5674) was not relocated during this survey, it was assessed by Haun and Henry (2005a) as significant under Criterion d. Concerning the Trail to Keaouhou (Site 15243), no surface remains identified and Haun et al. (2022) noted that the ground surface in this area had been mechanically grubbed. Similarly, Haun et al. (2022) did not identify any remnants of Trail to Kainaliu (Site 24259). Regarding the Kau Cemetery, Haun et al. (2022:20,29) noted that "[t]he remains of the cemetery appear to be situated on a small rocky knoll, with the eastern two thirds of the cemetery having been destroyed by the construction of the adjacent golf course. A section of formed concrete, believed to have been a portion of a disturbed grave, possibly a capstone fragment, was also identified in the**

**Kau Cemetery area. Furthermore, Haun et al. (2022) hypothesized that Site 24261, which was described as a permanent habitation structure, may actually be associated with the Kau Cemetery.”**

Comment:

The DEIS should provide further information about the destruction of the cemetery, the impact on iwi kupuna, and what, if any, mitigation occurred. The destruction of these sites and many others provides further support for a proposed action that ho’oponopono the destruction in this wahi pana and that further resort- and tourism-related development is inappropriate.

Comment:

DEIS Appendix D: “Archaeological Reconnaissance Survey” is improperly titled. Appropriate legal title is “Archaeological Inventory Survey”. Report has no table of contents or page numbers and is improperly presented.

These comments were the result of HIG volunteers and do not represent a complete review of the DEIS.

Mahalo for this opportunity to comment.

## West Hawaii Surfing Association

Keauhou Bay is still worth saving for once destroyed it won't be the same. Aunty Lily Ha'ano Kona who was born here spoke the same, we don't want Waikiki.  
Keep it special open and respect our lands and let it be.  
For the now and next generation for our Keiki's.



**Individuals**



## Pat Aarhus

Vote No on Proposed development of Keahou Bay- leave bay as it is- Pleade & Thanks, Pat Aarhus

## Alexia Aberee

Kamehameha School's Bungalow Resort Development will clear land that has been protecting Keahou Bay from golf course runoff pollution for years, and the development will kill an entire ecosystem.

The "Natural Ground Cover has 10% runoff, where as development has 55% runoff..." This was taken from NOAA's website and it proves the natural land has been soaking up the above golf course pollutions before it runs into the bay for years.

"Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development..." This info was taken from Global Coral's website.

"Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." This info is from Environmental Evidence Journal website and proves the development will kill coral and marine life.

Kamehameha Schools say they need money and that's why they want to Develop a Big Bungalow Resort in small, historical Keahou Bay. They have already developed lands they could use to make money from that they hardly use, but for their Private Events. Please watch the videos at the bottom to learn more about this.

Listen to Kupuna Kumu Lily Kong's video below. She is a Keahou Bay Hawaiian descendant who opposes development. Stand with her by giving your time to 5 Easy Steps below and HELP Save Keahou Bay.  
MAHALO!!

Claude Acoba

Very Supportive of this project! Believe this is the best use of land to provide resources for protecting historical landmarks and the Bay Area. Would rather see this type of development than more homes for high wealth families who are not local to the island. We need to preserve and continually educate the tourists and local residents who use this great asset.

Lillian Ah Nee

To Whom it May Concern,  
Please REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort.  
Please acknowledge that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keaouhou Bay as stated in all the different researched articles below.  
Please, DO NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.  
I am in full agreement with the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area.

Please see attached PDF for detailed letter on the multitude of negative impacts facing Keaouhou Bay from this proposed development.

Mahalo for your time and consideration,  
Lillian Ah Nee

To Whom it May Concern,

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#### ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

#### Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from

<https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

#### FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED

The green sea turtle is federally protected and can be seen in Keaouhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

**Allowing this development WILL POLLUTE Keaouhou Bay.** The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!) states this fact clearly, Keaouhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, mania rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

## THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring more people down to Keauhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keauhou Bay will likely be changed forever.

This information is from a NOAA Scientist: "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie!'" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought."  
<https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-four-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keauhou Bay is the monk seal and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keauhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keauhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems."  
[https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species."  
[https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project.

GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use."  
<https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system.

The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at:

<https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where the Hawai'i government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keauhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

#### ALGAE BLOOMS KILL CORAL AND MARINE LIFE

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development..The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution. . . "  
<https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..."

<https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

**FURTHERMORE:** "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location."  
<https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

#### ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats."  
<https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments.

<https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20says%20a%20new>

#### The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways."

<https://www.stormwatershepherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

#### NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that

underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust  
<https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources  
<https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

LEARN FROM OTHERS:  
RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and

its waters. And much of it starts right in the urban and suburban neighborhoods where we live."

<https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

#### MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide ..."

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off)."

<https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event>

-hawaii#:~:text=Coral%20Bleaching%20is%20Occurring%20more,had%20catastrophic%20impacts%20state%20wide.

This article is by the Coral Reef Alliance here in Hawaii. "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands#:~:text=Hawai%CA%BBi's%20reefs%20face%20major%20global,into%20Hawai%CA%BBi's%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plosone.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-0200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and

sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments Kill Marine Life

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creates/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3\\_6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3_6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

#### HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..."  
<https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life."  
<https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks  
<https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources  
<https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

if a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed.  
<https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability."  
<https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20study%20said.>

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct  
<https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram

data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management."

[https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=vsakgQNhauhJAnWwAq453RgN0AjWeli9nR3ZoTv0PyGzA5lc\\_H0O1zcHNIP3AShncgKRy6\\_vkLPw49dbmBYoXSg3Y1MgQIGBZsapidGUH7O1SLbu9x5P3xED4Kx4T0s.lvgQ1a7ZRR3rUbraxpodJd2AoNiSmWsuXb7JJEDdpJgOGJpx71TJWdCfXvFKJZYeNdcJj3Sw\\_dnaUg5IZhcfPBDImmaH15yqT5Q%3D&tracking\\_referer=abcnews-go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=vsakgQNhauhJAnWwAq453RgN0AjWeli9nR3ZoTv0PyGzA5lc_H0O1zcHNIP3AShncgKRy6_vkLPw49dbmBYoXSg3Y1MgQIGBZsapidGUH7O1SLbu9x5P3xED4Kx4T0s.lvgQ1a7ZRR3rUbraxpodJd2AoNiSmWsuXb7JJEDdpJgOGJpx71TJWdCfXvFKJZYeNdcJj3Sw_dnaUg5IZhcfPBDImmaH15yqT5Q%3D&tracking_referer=abcnews-go.com)

### INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste each year."  
<https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keauhou Bay. On Hawaii Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill

By Megan Moseley September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and

glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

Drought Conditions On Hawai'i Island Prompt Water Supply Message

by Big Island Video News

on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information from the U.S. Drought Monitor. There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawai%CA%BB-i-island-prompt-water-supply-message/>

U.S.

Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to significant droughts, and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the world's largest surfing wave pool opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe."

"We are in a water crisis, that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawai'i, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

UPDATE: HELCO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity us is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

Big power supply problems continue to plague Hawaii Island

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES

A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawaii'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems.

<https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state. This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added."

<https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island.

<https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: All of these roads only have two lanes!

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution."

[https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr.  
<https://www.youtube.com/watch?v=-FQSSnPDjI8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

**MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC and WASTEWATER:**

1) **Hawaii Deals with Burgeoning Waste Management Problem**

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled."  
<https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawaii Sanitary Landfill reaching capacity.

The West Hawaii Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years."  
<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) **Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste** Hawaii Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona."

<https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables?" BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support."

<https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) "The overwhelming plastic waste Hawaii visitors leave behind  
By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips."  
<https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A County commission drafts ordinance aiming to ban recyclables at West Hawaii landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawaii County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill."  
<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend."  
<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawaii Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions."  
<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona."  
<https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii Department of Health."

<https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs, Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment.  
<https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30."  
<https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators."  
<https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) HELCO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night."  
<https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply  
Hawaii'i Public Radio | By Savannah Harriman-Pote  
Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawika Uyehara, deputy director of Hawaii County's Department of Water Supply."  
<https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) News Hawaii'i County issues mandatory 25% water restriction for North Kona August 7, 2023 - 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawaii'i Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawaii, the Hawaii'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem.  
<https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large\\_generators/](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large_generators/)

20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new

development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

#### HISTORICAL AND CULTURAL SIGNIFICANCE:

The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawaii. After being added back in 1978, the law is part of Hawaii's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina.

The Law of the Splintered Paddle is also on Kamehameha Schools website. The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads.

<https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-20-0-years-after-k>

Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.

#### IN CONCLUSION

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Ecosystem in Keauhou Bay and "The Endangered Species Act of 1973 (ESA or "The Act"; 16 U.S.C. § 1531 et seq.) is the primary law in the United States for protecting and conserving imperiled species. Designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President Richard Nixon on December 28, 1973. The Supreme Court of the United States described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation". [1]" [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other. This land MUST be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come.

In addition to the natural disaster this will cause, Hawaii Island is already having serious infrastructure and resource issues that have yet to be solved. These issues MUST be solved before considering another resort development on Big Island.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly

Lillian Ah Nee

protects the marine life and environment from further damage. The location is NOT suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen.

Please save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.

Mahalo,

Lillian Ah Nee

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**From:** Lily Ah Nee [REDACTED]  
**Sent:** Monday, August 5, 2024 9:27 AM  
**To:** Keaouhoubay@ksbe.edu; Planning@hawaiiicounty.gov; Alex.Roy@hawaiiicounty.gov; 221053-01 KS Keaouhou Entitlements  
**Subject:** Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT  
**Attachments:** Keaouhou Bay Research Letter.pdf  
**Categories:** Yellow Category

Please find attached below my letter of opposition to the Keaouhou Bay development.

Mahalo for your time and attention,  
Lillian Ah Nee  
[REDACTED]

To Whom it May Concern,

Please **REJECT** Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort.

Please acknowledge that a Bungalow Resort WILL have a **SERIOUS NEGATIVE IMPACT** on Keaouhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

I am in full agreement with the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area.

#### ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from  
<https://www.fisheries.noaa.gov/national/angered-species-conservation/angered-species-ac>

#### FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED

The green sea turtle is federally protected and can be seen in Keauhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from  
<https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

**Allowing this development WILL POLLUTE Keauhou Bay.** The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!), states this fact clearly. Keauhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawaii are protected by the Endangered Species Act (ESA) and additionally protected by Hawaii Revised Statutes Chapter 195D (HRS) and Hawaii Administrative Rules (HAR) 13-124." This information was taken from this site  
<https://dlnr.hawaii.gov/species/sea-turtles/>

#### THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring more people down to Keauhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keauhou Bay will likely be changed forever.

This information is from a NOAA Scientist: "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie!'" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought."  
<https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawaii Revised Statutes (HRS) Chapter 195D and Hawaii Administrative Rules (HAR) 13-124." This was taken from  
<https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keauhou Bay is the monk seal and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keauhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keauhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems."

[https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species."

[https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project.

**GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS**

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use."

<https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system.

The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at:

<https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where the Hawaii government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keauhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

**ALGAE BLOOMS KILL CORAL AND MARINE LIFE**

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution. . . ."

<https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..."

<https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

FURTHERMORE: "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location."  
<https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

## ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20says%20a%20new>

The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershepherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that

underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

#### LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow...

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and

its waters. And much of it starts right in the urban and suburban neighborhoods where we live."

<https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

#### MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii". Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide...

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off)."

<https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event>



sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival"  
[https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

it's Been Proven Resort Developments KILL Marine Life

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon. The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment."

<https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO.  
<https://www.marinebio.org/creates/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

#### HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..."  
<https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life."

<https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks  
<https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources  
<https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed.  
<https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment – especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability."

<https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=9630885&#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20study%20said.>

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shoes, that more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct  
<https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram

data from tourists and high-resolution live coral cover maps in Hawaii, we find that regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management.”  
[https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaJhJAnWAq453RgN0jAWei9jR3ZoTv0PyGzA5ic\\_H0O1zcHNIP3ASnhcgKRy6\\_vKLPw49dbmBYoXSg3Y1MgQIGBZsapsdGUHi7O1SLbu9x5Pr3xED4Kx4T0s.lvgQ1a7ZRR3rUbraxpodJd2AoNISmWsuX87JJEDdpj8OGJpx71TJWdCfXvFKJZYeNdcJ3Sw\\_dnaUg5IZhcjPBDImmaH15yqT5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaJhJAnWAq453RgN0jAWei9jR3ZoTv0PyGzA5ic_H0O1zcHNIP3ASnhcgKRy6_vKLPw49dbmBYoXSg3Y1MgQIGBZsapsdGUHi7O1SLbu9x5Pr3xED4Kx4T0s.lvgQ1a7ZRR3rUbraxpodJd2AoNISmWsuX87JJEDdpj8OGJpx71TJWdCfXvFKJZYeNdcJ3Sw_dnaUg5IZhcjPBDImmaH15yqT5Q%3D&tracking_referrer=abcnews.go.com)

#### INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste each year."  
<https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Kealahou Bay. On Hawaii'i Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawaii'i landfill

The West Hawaii'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawaii'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

A County commission drafts ordinance aiming to ban recyclables at West Hawaii'i landfill

By Megan Moseley September 6, 2023

Hawaii'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawaii'i County Director of Environmental Management, told commissioners the West Hawaii'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson George Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Kaahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and

glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste.”

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawaii's government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

Drought Conditions On Hawaii's Island Prompt Water Supply Message

by Big Island Video News  
on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawaii's island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawaii's island is under "Moderate Drought" conditions, according to the latest information from the U.S. Drought Monitor. There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawaii's County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawaii%CA%BB-i-island-prompt-water-supply-message/>

U.S.

Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to significant droughts, and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the world's largest surfing wave pool opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe."

"We are in a water crisis, that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawaii, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

UPDATE: HELCO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity use is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

Big power supply problems continue to plague Hawaii Island

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urg-ed-to-reduce-electricity-use-through-april>

FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES

A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawaii'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems.

<https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state. This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added."

<https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island.

<https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: All of these roads only have two lanes!

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution."  
[https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr.  
<https://www.youtube.com/watch?v=FQSSnPDjI8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawai'i Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC and WASTEWATER:

1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled."  
<https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years."  
<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona."

<https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4)"What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17, 2022

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support."

<https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) "The overwhelming plastic waste Hawaii visitors leave behind  
By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips."

<https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill."  
<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawai'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend."  
<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawai'i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions."  
<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca-%BBi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona."  
<https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawai'i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawai'i Department of Health."

<https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs, Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment.

<https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi' Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30."  
<https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators."  
<https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) HELCO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night."  
<https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawika Uvehara, deputy director of Hawaii County's Department of Water Supply."  
<https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) News Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawaii Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawaii, the Hawaii County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem.

<https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/)

20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new

development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

#### HISTORICAL AND CULTURAL SIGNIFICANCE:

The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawaii. After being added back in 1978, the law is part of Hawaii's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

-Caring for and serving one's people

-Knowing and doing what is pono (right)

-Standing for the principle that leadership privilege is earned

-Taking kuleana (responsibility) for those we serve

-Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

The Law of the Splintered Paddle is also on Kamehameha Schools website. The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads.  
<https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-20-0-years-after-k>

Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.

#### IN CONCLUSION

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Ecosystem in Keauhou Bay and "The Endangered Species Act of 1973 (ESA or "The Act"; 16 U.S.C. § 1531 et seq.) is the primary law in the United States for protecting and conserving imperiled species. Designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President Richard Nixon on December 28, 1973. The Supreme Court of the United States described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation".[1]"  
[https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other. This land MUST be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come.

In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved. These issues MUST be solved before considering another resort development on Big Island.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly

protects the marine life and environment from further damage. The location is NOT suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen.

Please save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.

Mahalo,

Lillian Ah Nee

Loke Aloua

**From:** Mercedes Ahlstrand <[REDACTED]>  
**Sent:** Tuesday, March 4, 2025 6:09 AM  
**To:** 221053-01 KS Keaouhou Entitlements  
**Subject:** Keaouhou Bay Development - Hawaii 96740

Good morning,  
I would like to ask the status of Keaouhou Bay Development - Hawaii 96740.

- What is the status of the project?

Thank you,  
**Mercedes Mojarro**  
*Planning Data Specialist*



**DODGE CONSTRUCTION NETWORK**

**Disclaimer**

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**From:** Loke Aloua [REDACTED]  
**Sent:** Wednesday, August 7, 2024 2:34 PM  
**To:** 221053-01 KS Keaouhou Entitlements  
**Subject:** Comments Keaouhou Bay Management Plan, August 7, 2024  
**Attachments:** KeaouhouDEISComments\_2024.pdf

**Categories:** Yellow Category

Aloha,

I am submitting comments in **opposition** to the proposed project: Kamehameha Schools, Keaouhou Bay Management Plan Draft: Environmental Impact Statement

Tax Map Keys (3) 7-8-012:098; (3) 7-8-012:101; (3) 7-8-010:044; (3) 7-8-012:027; (3) 7-8-012:004; (3) 7-8-012:013; (3) 7-8-012:014; (3) 7-8-012:054; (3) 7-8-012:065; (3) 7-8-012:007; (3) 7-8-010:049; (3) 7-8-012:103

Keaouhou, Island of Hawaii, Hawai'i and in **support of the No Action Alternative**.

Loke Aloua

--

**Cocoa cracka butta morning, hāloa till high noon, dry fish poi will meet you.**

August 7, 2024

Aloha,

My name is Loke Aloua and I am submitting comments in **opposition** to the proposed development for Kamehameha Schools, Keaouhou Bay Management Plan Draft: Environmental Impact Statement

Tax Map Keys (3) 7-8-012:098; (3) 7-8-012:101; (3) 7-8-012:048; (3) 7-8-010:044; (3) 7-8-012:027; (3) 7-8-012:004; (3) 7-8-012:013; (3) 7-8-012:014; (3) 7-8-012:054; (3) 7-8-012:065; (3) 7-8-012:007; (3) 7-8-010:049; (3) 7-8-012:103  
Keaouhou, Island of Hawaii, Hawai'i and support the **No Action Alternative**.

This is not an appropriate development for this area. While the area should be cared for to bring to life the cultural significance of the area, this development does the opposite. This kind of project can be done by the people no need this fancy project that kills the spirit of this place. Why bring more tourists who will wreckreate in this space? Why not put kánaka back on 'āina to put back what was forcibly removed? Even KS has a history of evictions and wrongful treatment of Native tenants? Why not use your folks resources for be one example, put Hawaiians on the land, bring back the native species? No bring the natives back just for decorate your resort development. Pau dat kine already, nuff. Testimonies received during previous consultations have shown that the community does not support this development. Kamehameha Schools has not listened to the community and instead is plowing forward with their plans for a development for financial revenue. The health of the place is the priority, simple. Does this project enhance or deteriorate the health of the place?

My kūpuna are from this area. All the mo'olelo I have been told get erased by this proposed development. So much has changed already the space is unrecognizable. Why bring more of this erasure when there's the potential to actually serve the land and water? Bring back the birds, limu, fish, plants to its optimal health. Everytime, money, money, money. Go plant kalo. Go eat from the land. Live more simply. Stop developing for make money. We will lose everything with this kind mindset. No matter anymore Hawaiian, not Hawaiian all these developments like money. If I never read KS label this could be one foreigner coming in with one nada master plan for erase Hawaiians.

I support the No Action Alternative. I read through the plan and it's incomplete. I have the following comments and questions listed below.

**Proposed project lacks necessary water credits**

The DEIS states that the proposed project will require 146,199.2 GPD as its max daily demand, 487,330.8 GPD for total peak hour demand, and 97,466.2 GPD total average daily demand (5-10, Table 5.2). Yet, the average water demand is assumed to be 86,385 GPD which is equivalent to 240 water credits which is significantly less. All of the three

water projections for max daily demand, total average daily demand, and total peak hour demand are well beyond the equivalent water credits.

Each water credit is equivalent to 400 GPD. The total peak hour demand requires 1,218 water credits, total peak hour, 365 water credits for max daily demand, and 243 water credits for the total average daily demand. Comments submitted by the DWS in Table 7.2 clarify that, "Please be informed that the applicant has assigned **101 units of water** to TMK 7-8-010-044 through an executed Water Agreement with the Water Board, dated April 4, 2012. Additional water could be made available subject to the Water Board's approval." **Thus, the proposed project does not have necessary water credits for the project to proceed.**

How can this project proceed when it does not have the necessary water credits that it is estimated to use? Repeatedly, the DEIS states that KS will work with DWS when the necessary water credits are not confirmed available for this proposed project. The project should be denied until such credits are obtained by DWS and necessary impacts to ecosystems and cultural practices analyzed with full consultations. Kona has major water issues. This is the dryside of the island and everyone is developing like freshwater is infinite. KS claims this project has been scaled back but really it is still too big even for the amount of water that is available for this parcel. 101 credits translates to approximately 40,400 GPD. Where is the development for this type of allotted water use?

I have the following questions:

- How many water credits does KS have in possession for this proposed development?
- How will KS acquire additional water credits?
- Are additional water credits available?
- Where will the well for the project be supplying the development with water be located?
- What are the environmental impacts of withdrawal on groundwater dependent species, near and deep shore fisheries?
- What are the impacts of water use on traditional and customary practices?
- What ahupua'a will be supplying this proposed project with its potable water?

#### **Wastewater facility capacity needs updated capacity for 2024 and the improvement analysis is incomplete.**

The DEIS states, "He'eia WWRF will have capacity to accommodate the increase in wastewater flows based on the information from 2016. Further study will be needed to find out if any capital improvements of the WWRF and facilities leading up to it will need improvements with this increase in flow" (7-12). The DEIS should provide updated pumpage capacity for the He'eia WWRF. Pumpage estimates used for this project are almost a decade old. Furthermore, wastewater analysis should assess whether or not capital improvements are needed before the project plans are accepted, if the project

requires capital improvements then those plans should be provided in this DEIS for public review. Capital improvements are major projects that have the potential to cause adverse impact or require further funds that should not be of the taxpayers.

I have the following questions:

- What is the He'eia WWRF pumping capacity as of 2024?
- Considering current data for the He'eia WWRF can this facility receive the wastewater produced from this site?
- What are the capital improvement projects needed to ensure that the wastewater can be received by the He'eia WWRF?
- Can the current sewage line system receive the waste and transfer it to the He'eia WWRF?

#### **Traffic Analysis fails to account for tsunami and emergency evacuations.**

Keaouhou Bay is frequented by a wide array of users (e.g., fishers, divers, swimmers, boat operators, paddlers) including 'ohana with keiki and elderly. The entirety of the proposed project sits within a tsunami evacuation zone. With existing traffic the roads are already congested. Yet, the Traffic Analysis fails analysis shows little impact and too fails to assess how additional vehicles and populations will impact traffic during emergency evacuations. Public safety and evacuations during an emergency situation should be prioritized and assessed to provide realistic projections of traffic and added population impacts. This is mandatory, not optional. How you going bring all this added traffic and users then not assess emergency evacuation scenario? What happens when people die cause they cannot get out with gridlocked systems? Why not prevent this kind catastrophe? The DEIS should provide this analysis to ensure that public safety is considered and current and proposed roads can indeed ensure safe evacuations.

I have the following questions:

- How will added vehicular and pedestrian traffic impact emergency evacuations?
- What is the traffic assessment for emergency evacuation scenarios?

#### **Current and added capacity of the proposed development on existing medical facilities unassessed**

The DEIS provides a list of medical facilities near this proposed development, yet fails to provide any substantive analysis of how population increases will impact existing medical facilities. Kona is in dire need of a second hospital and upgrades to the existing facility. Identifying them as a medical facility is not an assessment. Identifying additional facilities that the existing community relies on like Urgent Care and West Hawaii

Community Health Center is also inadequate. These are primary care facilities for our 'ohana on the west side. The DEIS fails to assess how added population will add stress to these existing facilities. It is so careless to assume that there will be no impact and that listing them is enough; it is not. 'Ohana already wait hours if not days to get into these overloaded facilities. Have some decency and get it together. Provide a thorough analysis. Listing medical facilities by name is not an analysis, it's a list.

I have the following questions:

What is the current capacity of medical facilities listed in the DEIS?

How will the proposed project impact the carrying capacities of the medical facilities listed as available?

What is the assessment of impacts of population on the West Hawai'i medical facilities?

#### **Impacts to Keauhou Bay from increased users unassessed**

This proposed project will be increasing user density of the area. The impacts of this increased user density on Keauhou Bay should be assessed. It is ridiculous to propose this development which is directly seaside without having any safety measures in place for the biodiversity of the bay. This includes consideration for endangered and non-endangered species both terrestrial and marine. This project is premised by the assumption that this development will improve the area, yet it fails to actually consider the ecosystem of the Keauhou Bay, how ridiculous. It is so shameful to bring this type of project in and not actually consider the impacts to the bay and the marine life. How shame. More than 400 pages written with fancy graphs, pictures, and headings then no analysis on the impacts to the bay. KS will be responsible for bringing hundreds to thousands more people to Keauhou Bay. Where is the accountability for the health of the place? The impacts are beyond those of the project site. This old school all I gotta do is look at the boundaries of the land I like develop is pau. There are impacts beyond that need to be assessed.

I have the following questions:

What exactly are the impacts of these populations on the marine ecosystem?

What are these impacts to traditional and customary users of this space?

Where is the Ka Pa akai Analysis to assess these impacts and mitigation?

How will the proposed development and added users impact marine species?

What is the cumulative impact of the development on Keauhou Bay?

There are at least 12 individuals who received Land Commission Awards for land within the proposed project area. These 'ohana who have royal patents to the lands within this proposed development. 'Ohana are still in Kona.

I have the following questions:

Where is the chain of title to show proof of sale for RP 3888, RP 6391, RP6842, RP 4437, RP 6367, RP 7891, RP 8023, RP 4579, and RP Haluapo (Table 4-1)?

Have the descendants of these LCA awardees been notified of this development?

Have the descendants of these LCA awardees and those whose 'ohana frequented? Keauhou been consulted regarding the significance of archaeological remains?

I will standby to receive a detailed response. Please, no just stick all my comments in one table summarizing with one, "Mahalo for your comments."

Ke aloha 'āina,

Loke Aloua

**Clear title to lands within the project area**

Bill and Cindy Armer

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**From:** Bill and Cindy Armer  
**Sent:** Wednesday, August 7, 2024 4:29 PM  
**To:** Alex.Roy@hawaiicounty.gov; 221053-01 KS Keauhou Entitlements  
**Subject:** Comments on Keauhou & Kailiinehe proposed EIS project

**Categories:** Yellow Category

We are Bill and Cindy Armer, 20+ year outrigger canoe paddlers and 5 times weekly users of the Keauhou Bay area. We have been off-island or distracted with medical issues for the past three months and have returned to discover this massive document about this Hawaiian treasure. We appreciate many of the elements outlined in sections of this draft EIS especially the history sections. We did not have the time to raise more questions or create a more thorough response.

We take issue with the conclusion that the project developer felt they met the standard stated in the early pages of the document: "*HRS Section 343-5(e), enacted by Act 172 (2012), allows an applicant to prepare an EIS rather than an environmental assessment if the approving agency determines, through its judgment and experience, that an EIS is the acceptable level of environmental review.*" Kamehameha Schools stewards approximately 54 acres at Keauhou Bay, a relatively small area that is utilized in a variety of ways by tourists and residents alike. Historically, the significant demand and utilization of this area can and often creates congestion which leads to user conflicts along the bayfront. This unique and culturally significant area demands more time and consideration of factors than just more increase of profitability of the Kamehameha Schools investment of over \$100 million dollars.

A brief review of opponent postings in the Keauhou Bay area states that the project will result in 900 additional people daily in the immediate area and more than 150 homes. We were disappointed to find no direct discussion or defense about these allegations in the document. We certainly also challenge the lack of common sense and logic by the consultants, Fehr & Peers, who assert in this report that "The Draft Environmental Impact Statement (DEIS) provides an analysis of potential traffic impacts in Section 4.11. A Mobility Analysis Report (MAR) was prepared by Fehr & Peers to identify and assess existing and future mobility options as well as potential traffic impacts generated by the Project (Appendix E). The MAR found that the implementation of the Project would not result in significant traffic impacts." The issues of population density, emergency vehicles and daily traffic congestion demand a more complete and responsible conclusion. This is an area served by two lane road access and is frequently stopped for extensive waiting periods now--due to the explosion of residents, vehicles, and the impacts on the environment and the Bay. We have been through multiple evacuations of the tsunami corridor in Keauhou. We conducted numerous water quality studies for years in Keauhou Bay which revealed the extensive, ongoing degradation of the bay environment in the last 25 years. The bottom of the Kamehameha III cut-de-sac continuously floods and pollutes the dry well for the roadway for days after every rainstorm. The fish and crustaceans have declined, the ocean mammals do not visit as often, and frequent human swimmers are blessed with staph and even more serious infections.

We encourage you to complete a proper and full environmental assessment of this project. This area is too historical, too valuable, and too cultural to give the developer this easy pass with an EIS. Do the full environmental assessment of this project. Mahalo for your consideration of our request.

## Leiola Augustine

It is with a heavy heart that I write my response to the EIS below.

I was fortunate enough to be born as the granddaughter to a very special wahine, Tutu or aunty Lily Kong who was the last person to be born and raised in Keaouhou Bay. She dedicated her life to the preservation of the bay and through her I learned about our cultural heritage as Hawaiians and the rich history and culture of Keaouhou Bay.

There is no place that still exists like Keaouhou Bay. Having been the birth site and home site to many of our ali'i signifies its importance to Hawaiian culture and indigenous people. Its ability to self-sustain its population and those of neighboring ahupua'a through recent history makes this a very special place that could be lost if KS chose to develop the property to its full capacity of 700+ units vs the 150 units it proposes.

Contrary to what some people have recently said of my grandmother, she was not against development. She was against certain developments and development in ways that did not properly care for the land, preserve cultural and historical sites and displaced indigenous people. She knew, with no modern industry other than tourism, that development was inevitable in Kona. Without development such as all the condos, hotels and vacation rentals that surround Keaouhou Bay where would people who wanted to vacation here stay? Where would people who wanted to move here live? Without the economic contributions of those people how would future generations live in this modern, technological society?

She knew that in order for the following generations to thrive in a modern world that new skills through education would be required, but how are indigenous keiki going to be educated? How would they obtain the skills and resources to make a life among outsiders who had more economic and educational resources than we had here? Our princess Pauahi, through her schools and education programs are one of the few ways keiki would be able to learn those skills. She understood, and I currently live, the complex and complicated dichotomy of preserving our 'aina and culture while living in a modern world.

I'd like to make it clear that my preference is to see no further development in the bay and to actually remove certain features such as the seawalls that cover the beach and the restroom at Kaiilimehe that covers the spring and stop all commercial activity in the bay so the bay can return to its natural state. However, I also know that some of this is not realistic and therefore appreciate a private landowner who is willing to work with the community to ensure the property is developed with community involvement and with as much integrity as possible.

Volume I section 6.1 states: "Without comprehensive improvements, the Kamehameha Schools-owned properties would remain underutilized and underperforming financially". It might be helpful for those who oppose this development to understand that KS and the trustees are bound by the trust to financially increase the endowment for our Iahui. I welcome those opposed to this development and KS to think outside the box and offer another avenue for these lands that will achieve the desired financial benchmark other than a commercial and resort development. Those opposed, please understand that without meeting this financial benchmark or offering some other source of educational or financial support, you are continuing to displace indigenous

Hawaiians and taking away from our Iahui.

Regarding the "underutilized" portion of the above statement I do feel as though we should leave some of these areas as just that. Not utilized at all. I do believe and appreciate that our cultural sites are to be preserved with this new plan, but want to ensure that KS recognizes and understands that there is increasing sensitivity amongst indigenous Hawaiians as to not market our culture for financial gain or for our culture to be on display as a novelty. As a suggestion, let the families or those organizations that bear the responsibility of maintaining those sites or take ownership of the cultural significance of those sites, the freedom to choose who, how and if those sites, customs and history shall be shared.

Pollution - My tutu always spoke about the pollution and overuse of the bay. I do see that there is a plan to connect current and future facilities to the He'eia sewer system. Also, implementing water runoff solutions to eliminate further pollution of the bay will be imperative.

Commercial & Recreational Tenant Selection - I would like to see more clarity on the criteria for use and tenant selection in commercial and recreational spaces. Priority should be given to tenants who have a low impact on the bay and are inclusive of indigenous customers/participants, rather than those with a high impact and culturally exclusive practices. The same low impact and culturally inclusive criteria should be applied to recreational tenants, favoring those who are sensitive to cultural considerations over those who are high impact and exclusive.

Volume I section 3.1.5 paragraph 4 talks of the Kau cemetery, which was where my great grandfather and other family members along with other families that inhabited the bay were laid to rest. Also, volume II page 112 and 113 notes that Ilina (burial sites) and Iwi (bones) should be left in place. I appreciated Malay and Malay's recommendation to follow my kupuna's wishes to leave any Ilina and Iwi in place. However, even though my family's Ilina located mauka of the current volleyball court and mauka of the old Kona road has since been bulldozed by Mr. Post from Texas to build his golf course and our ohana's Iwi has since, without our approval, been relocated. My immediate ohana and I wish that the Ilina Kau to no longer be used as a golf course and to be further left alone. It does seem that figure 3-34 and figure 3-35 honors those wishes and that no further development would take place in that area.

In case I was not clear before, the restrooms/comfort station at Kaiilimehe beach must be relocated to allow for the spring can flow.

Furthermore, to any party who is using my ohana's mo'olele for commercial or monetary advancement or to further advance your position we ask you to stop. My tutu willingly and freely shared her mo'olele and mana'o so it would not be lost, but that does not mean that permission was granted to be used in connection with individual gain. Her mo'olele and her mana'o live through us, her living descendants.

I'd like to commend KS on its willingness to listen to and include community and kupu'aina involvement as this is only the second time (that I am aware of) a landowner in the bay has sought out the opinion of those with interests in the bay. We mahalo you for including us and ask that our ohana continue to be consulted as the progress of this project.

## M. Kekoa Aukai-Richardson

I oppose the proposed developments in Kaula Bay. The proposal ignores a key fact: our environment is in a delicate state, which means we should be protecting more lands and not developing any lands that we do not have to. The public concerns in Hawaii are also being ignored with this proposal of more development. The public continues to voice opposition to over-tourism, over-fishing, over-development, and pollution, as these are issues that are causing people and animals in Hawaii to have a reduced quality of life. This development will negatively impact a sacred place, residents, current business owners, and the magnificent marine life in the area. It is especially concerning that this proposal is coming from a Native Hawaiian organization that should by all logic and reason have every interest in seeing this area remain as undeveloped as possible. More parking spaces and shops will only lead to more people coming to the area, which the area cannot sustain. For anyone curious as to what that may look like, visit Hanauma Bay. Even though it isn't developed, far too many people are allowed to visit, and locals can see the results. It's a depressing place if you love marine life and nature. If you were to snorkel there you will see dead coral and very few fish or na honu. During COVID restrictions, when Hanauma Bay was closed, the marine life there started to bounce back. The evidence is clear: the more people in an area, the worse the environment will be. This is especially true in Hawaii because, unlike in some other places, the state and counties do very little to enforce laws on the books regarding marine life, and are not acting fast enough to create more laws and regulations to protect vulnerable places. What kind of credibility can Native Hawaiian organizations have when they are placing more importance on monetary gain than on preserving a sacred place that holds value far beyond any dollar amount to Native Hawaiians themselves? Why should anyone listen to Native Hawaiians who say the cost of living here is too high, there's too much development and over-tourism when this is how one of our most well-known Hawaiian institutions is making decisions that betray those concerns, and in a sacred place nonetheless. I stand with Kupuna Kumu Lily Kong, a descendant of the area. Her wisdom and heritage should be honored by not moving forward with this plan. Mahalo.

## Candi Baker

We need to protect our island. We don't need more concrete or vacation places. We need to save our corals, and sea life. Not make it a Disneyland for the rich. You are suppose to have the people's welfare not your paycheck as a factor. Do the environmental research!!!



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**From:** Jennifer Ball - [REDACTED] >  
**Sent:** Saturday, July 6, 2024 7:23 AM  
**To:** 221053-01 KS, Keauhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keauhoubay@ksbe.edu; Alex.Roy@HawaiiCounty.gov; rebecca.villegas@hawaiicounty.gov;  
[REDACTED]  
[REDACTED]  
[REDACTED]  
**Subject:** Attention Keauhou Bay #15 Comment Letter

To whom it may concern,

In a time of severe climate change, building another hotel on Keauhou Bay is a huge mistake. The Outrigger doesn't even have enough guests to keep it functional. Hotels do not ensure revenue.

Please, read the scientific proof below and state in your report that this Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT in Keauhou Bay as stated in all the different reported articles below.

Please see the following article that states "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES

Why does Hawaii have a runoff problem?  
Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from

Even with storm drains if you allow this development it WILL POLLUTE Keauhou Bay because as the above article (that was written in 2014 because runoff water from developments were polluting the ocean even then) states, and this is bay holds many sea creatures such as sea turtles, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals that have rested on the dock before and...

Keauhou Bay is a DOCUMENTED RESTING AREA for the ENDANGERED MONK SEAL, and if a resort is allowed to be built, that will bring a lot more people down to Keauhou Bay and if a monk seal is resting they most likely will disturb the monk seal with their selfies because it is fully known this is now a SELFIE CULTURE.

This information is by NOAA Scientist, "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media.

There's a seal on the beach! Let's go get a 'sealfie!'" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In , NOAA scientists used social media to monitor human activities around endangered . They discovered that human disturbance is more common than they thought."

Has there been a detailed traffic study for the increase in cars that will be added to this already severely traffic area?

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks

If you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years and, "Noise Pollution

Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behaviour of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project, because it is scientifically proven that developments will ALWAYS have rain runoff that will pollute nearby waters constantly during development and after.

Please, read the Scientific articles below written by NOAA, National Oceanic and Atmospheric Administration and other professional organizations, that prove that developments have ALWAYS polluted the water in every coastal development area.

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all Aquatic Life there, and even the Manta Rays that go there to eat zooplankton from the Manta Ray tours at night, and they eat it during the day in that area as well because they need to eat 5 times their body weight in zooplankton daily. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates

If you allow this bay to be development you will be allowing all types of marine life to die and there is NO WAY to stop this from happening because polluted runoff rain water

from developments can't be fully stopped. It is what has happened in ALL coastal developments.

Please read the Scientific proof below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide...

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off)."

This article is by the Coral Reef Alliance here in Hawaii. "An ecosystem under threat: Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive."

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development."

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal

stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii".

The Chesapeake Bay has a foundation that is trying to save it due to runoff pollution that was caused by developments, and the Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed because this bay is very small.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow...

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and it's rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live."

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay because it is so much smaller than the Chesapeake Bay.

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species."

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide."

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral."

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival"

It's Been Proven Resort Developments KILL Marine Life

The manta rays go to Keauhou Bay every night to eat zooplankton and if you allow this development that WILL have runoff water, you WILL be causing zooplankton to be seriously affected because as this article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in . As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that proves runoff from development in this area will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the

terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." htt

"Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain". This information is in article by MarineBIO.

Here is a research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton. There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

The above articles show that development of Keauhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this could cause the manta ray food source to disappear and that will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on the manta ray tour for their income.

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will force bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regards to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed.

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of every year are wreaking havoc on its natural -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in "

If you allow this resort to be developed, you will be destroying the coral reefs in the bay because this bay is extremely small and used by a lot of locals already for fishing, canoeing, swimming, snorkeling, paddle boarding, surfing, boating...it can't afford more use by many thousands more people yearly.

If you allow Keauhou Bay to be developed there will be a higher population in the bay and that will hurt the coral in the bay as well, because it's known that, "Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with metapopulation theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii. Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management."

A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads

The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side.

Allowing another resort to be developed will bring more cars that will lead to a lot more traffic that the island can not handle, please read the articles below by different NEWS companies that prove this point.

This NEWS article by Hawaii! News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Please watch their video on their link below because it is a professional report on Big Island traffic problems.

With more tourists comes more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state, This time last year Hawaii island was at five traffic deaths, as of April 1, 2024, they're at 14. Seven of which happened in the last two weeks...

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added."

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is the same for Big Island. The traffic problems they talk about are the same issues here on Big Island, and this article also gives one Big Island example, "On the Big Island, the mayor had to issue shutting down Waipio Valley Road due to overuse and poor prior maintenance."

Please, watch the NEWS video from the link below on aerial footage in Hilo because the footage shown is the same thing that is happening on Aalii Drive and Queen K HWY, and for the same reasons.

There are 2 developments already on Aalii Dr. being built as of today, and more are scheduled for this road in the near future, and Aalii Dr. and Queen K HWY are the roads Kamehameha Schools Bungalow Resort will be using if approved and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow already.

The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well.

See the photo below that proves this point in Kona, and here is the NEWS article by KITV NEWS that talks about Hilo and the same thing is happening in Kona on the roads Kamehameha Schools wants to develop their resort, "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution."

There was a crash on Aalii Dr. and when there is an accident on this road, it turns into only one lane that needs a flagger to help direction traffic. and that adds even more traffic to this already seriously congested road, and Kamehameha Schools wants to add a resort on this road, and that will increase the traffic even more.

No new hotel on Keahou Bay.

Please, save Keahou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools because all of these articles prove it would be extremely damaging to the waters at Keahou Bay.

Thank you,

Sincerely,

Jennifer Ball

[Redacted signature]

(she/her)

[Redacted contact information]

## Joyce Barbarich

Keauhou Bay receives an inordinate amount of pollution from runoff, especially after rain. Clearing land and paving more roads will remove the natural filter that cleans some of the water. This and increasing human and vehicle traffic above the bay will further damage the marine life in and near the bay. Adding upscale tourist accommodations to a small area of great historical and cultural importance, the birthplace of King Kamehameha III, is a shocking affront, disrespectful to Hawaiians, and a blatant grab for yet more money at the expense of the environment, local residents, and those who sincerely care about history. Setting up an educational feature on the birthplace site is warranted but bringing hundreds more tourists and vehicles to the area will be catastrophic. Please deny permission for this new resort development.

**From:** Danica Ann Barretto  
**Sent:** Tuesday, July 23, 2024 8:56 AM  
**To:** 221053-01 KS Keauhou Entitlements  
**Subject:** Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT!

**Categories:** Green Category

To whom it may concern,

Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keauhou Bay.

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "*What is the biggest source of pollution in the ocean?*" by NOAA, *National Oceanic and Atmospheric Administration*, states, "*When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides.*" It also states, "*Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff.*"

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "*Putting the Earth in Play: Environmental Awareness and Sports*," shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endanger these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,  
Danica Ann Barretto

Mark Barville

Please leave the area alone. Keep it natural. Plant native species, create natural paths with benches, remove unnecessary concrete and asphalt. What would Hawaiians of 1800 have wanted?

APPLIED LIFE SCIENCES LLC  
Hawaii and California

July 24, 2024,

VIA EMAIL

COMMENTS REGARDING:

Draft Environmental Impact Statement (DEIS)  
for the Kamehameha Schools Keauhou Bay Management Plan  
Keauhou, Hawai'i Island, Hawai'i

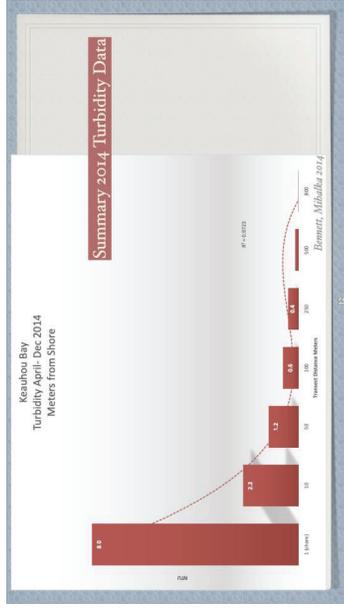
Richard H. Bennett MS, PhD  
Applied Life Sciences LLC

The following comments pertain specifically to water quality issues affecting Keauhou Bay. The draft EIS does not address these nor accounts for the fact that the State and the EPA list Keauhou Bay as an Impaired Water Body under section 303 D of the Clean Water Act (CWA). That law requires that impacts to the Bay be mitigated and that further impairment does not occur. This requirement under the law has not been met. Any development in the watershed needs to be conducted by a careful evaluation of this fact. Under the law, remediation begins by conducting a Total, Maximum Daily Loading study known as a TMDL. The Bay is listed as impaired for exceeding the limits for turbidity. Turbidity has several causes in near-shore waters, such as runoff water with fine sediments and phytoplankton. Our research shows that turbidity is a problem in Keauhou Bay in the absence of surf events. The turbidity is also due to the overgrowth of marine phytoplankton. Our studies show that turbidity declines along a line moving offshore. The inner Bay has very poor circulation and is where most sediments and other factors causing turbidity arise. Phytoplankton grow in response to increased temperature and nutrient loading in the Bay. The lack of adequate circulation amplifies the problem.



The photo was taken in the summer of 2007 in response to concerns about the greening of Keauhou Bay. The brand name on the canoe paddle is not legible. (photo credit Bennett).

Figure 1. Nine-month summary of turbidity data for the Bay.



(Bennett 2002)

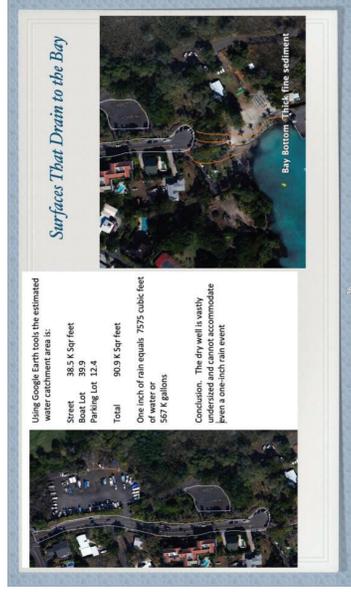
The nine-month summary chart above shows that turbidity is worse at the shoreline and decreases non-linearly in waters offshore. The slight rise in turbidity at 250 meters may be more of a phytoplankton effect than sediment.

The DEIS makes the following statement regarding groundwater.

*Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project in this area, surface runoff generally does not occur in the typical rainfall occurrence. Runoff either percolates into the underlying groundwater or evaporates into the atmosphere. There are no drainage reports or calculations on file with the County of Hawai'i or DOT for the adjacent public roadways or surrounding developed properties. However, existing stormwater runoff peak flow estimates for the three (3) drainage basins within the Project Area are presented in Table 4-4.*

The draft EIS fails to account for surface water runoff from Kamehameha III Road. At the Bayside terminus of the road is a dry well. It is typically loaded with sediment and unable to handle the storm flows that come down the length of the road. Thereafter, water overflows the curb and goes down the driveways and the slope into the Bay. As it does, it picks up considerable sediment and delivers it to the near-shore waters, increasing the turbidity problem (Fig 3).

Figure 2. Rain catchment area and water volume estimate.



(Bennett 2002)

As calculated above, a one-inch rain can produce over five hundred thousand gallons of water, with most of the flow eroding fine sediments as it enters the Bay (Figure 3). The County of Hawai'i was made aware of this dry well failure four years ago. Some of this water comes off of Kamehameha Schools land.

The DEIS statement that rainwater percolates to groundwater suggests groundwater is the terminus and the water does not flow to the sea. For at least 25 years, it was the position of the State that groundwater under the land does not communicate with the sea. Considerable research, such as Kneee (2010), Dulai (2020), Peterson (2009), and others, shows that the State's policy is specious and not science-based. The State's anchialine system is a subterranean estuary (Bishop 2015). Consequently, the DEIS must reconsider the implication that the local groundwater is an inconsequential endpoint for fresh and waste water flows. A recent US Supreme Court decision held that wastewater disposal to the nearshore groundwater without the necessary permit was a violation of the CWA (see footnote page 7).

Figure 3. Stormwater and sediment flow into the Bay.



The photos suggest considerable sediment erosion into the Bay.

Nutrient Degradation and Impairment of the Bay.

The draft EIS does not account for the elevated levels of nutrients in the Bay. Again, our research shows that nitrogen and phosphorus exceed state standards. Unlike other locations, it is unfortunate that the Hawai'i Department of Health fails to measure these nutrients in the Bay. Thus, conducting a nutrient analysis of the Bay waters was necessary. That analysis is provided below.

Table 1. Nutrient analysis along transects over three quarters of 2019

Location	Date	SI	SI	NH <sub>4</sub> <sup>+</sup> NO <sub>3</sub> <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	NO <sub>3</sub> <sup>-</sup>	Salinity	HPO <sub>4</sub> (State)		Keaouhu State		Hawaii (EIS) (State)	
								µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Keaouhu Shoals	1/22/19	5148	60.1	423.6	18.2	29.6	29.7	174.0	47.6	465.2			
Keaouhu Shoals	1/22/19	5115	43.2	429.4	16.1	29.6	29.1	159.0	44.4	427.5			No
Keaouhu Shoals	1/22/19	5185	41.2	205.5	16.4	30.9	30.9	175.8	37.0	329.9			No
Keaouhu Shoals	1/22/19	1197	23.2	46.5	11.3	33.5	4.2	31.3	19.3	88.4			No
Keaouhu Shoals	4/15/19	3224	26.9	263.1	1.1	30.8	16.9	117.6	38.2	313.3			No
Keaouhu Shoals	4/15/19	2106	18.3	216.6	8.5	32.1	12.7	76.0	28.1	209.0			No
Keaouhu Shoals	4/15/19	2158	16.4	228.8	2.6	32.2	13.0	79.7	28.7	213.3			No
Keaouhu Shoals	4/15/19	855	11.7	36.7	16.4	33.6	6.9	16.5	16.7	55.1			No
Keaouhu Shoals	7/20/19	5031	15.8	237.0	16.4	32.4	11.7	86.1	26.184	180.0			No
Keaouhu Shoals	7/20/19	1453	13.7	209.6	12.7	32.6	11.1	80.0	24.808	152.4			No
Keaouhu Shoals	7/20/19	1402	14.0	210.7	7.3	32.7	10.8	66.8	24.297	155.1			No
Keaouhu Shoals	7/20/19	226	3.7	24.8	5.3	34.3	5.8	5.7	14.233	47.8			No

Note: The NELHA Lab has multiple certifications, including the State Department of Health

None of the nutrient values for water collected as shown above met state standards. The elevated nutrients in the Keaouhu Bay watershed come from various sources. A common misconception is that fertilizers applied to private properties and the local golf course are the significant sources. However, research shows that nutrient leaching from the Mauna Kea and Keaouhu golf courses is minor compared to the nearby homes on Puako Drive (Dialer 2011). The likely source is the myriad cesspools in the watershed. Some homes on the North peninsula of the Bay are connected to sewers, but most homes are not.

The elevated levels of ammonia suggest a water connection to fresh sources of animal and human waste. Ammonia in marine water is quickly converted to nitrate. Our data also shows the nitrogen and phosphorus levels exceed state standards for the Bay. Had the State collected this data, the EPA would declare water impairment from these nutrients. These elevated nutrients can cause the seasonal "greening" of the marine waters (Smith 2020).

The draft EIS makes no mention of nutrient pollution issues and implies that all new developments will be connected to the sewer line that transmits raw sewage to the Heeia wastewater treatment plant. The treated wastewater containing most of the nutrients in human waste is conveyed to the golf course to irrigate the golf course. It is not known the extent to which those nutrients leech into the groundwater and the Bay. It is also not known how much more water the golf course will utilize in the future.

Several residences and perhaps some commercial facilities in the proposed development area use cesspools or septic systems for human waste management. The impact on the Bay is significant and needs to be described and mitigated. However, this problem is not mentioned in

the DEIS. It is more than advisable that the Project connect all waste systems to the regional sewer.

It is well established that sewer lines leak, which is a function of many factors such as piping class and age (Rutch 2006). In the project area, some sewer lines are quite old. One such line on the East shore of the Bay broke during a significant tidal event. The DEIS does not account for sewer line leakage or the risk from extreme tidal events. This problem needs to be evaluated, and where sewer lines are at risk and need to be replaced by resilient lines such as High-Density Polyethylene (HDPE).

Figure 4. Nitrogen (delta N 15) signatures along the Keauhou Region shoreline



Figure 1 Q (Dallier 2011)

#### Nitrogen Signatures in the Keauhou Area

The magnitude of the delta N 15 value indicates the greater contribution of human (animal) waste nitrogen. Raw sewage water is currently conveyed from the hotel at the Bay to the Heeia Wastewater Treatment Plant (HWWTP). The Secondary treated wastewater (WW) is provided to the local golf course for irrigation. How much water the golf course needs or could utilize is unknown. Casual observation of the course suggests that it is under-irrigated. Nutrients in the WW are not removed but beneficial to the grass. Delta N 15 data indicates that the golf course contributes negligible human (animal) nitrogen to the near-shore waters.

In contrast, the Delta N 15 values are higher in the Bay proper. The source is likely human waste from cesspools in the immediate region. Less than half of the homes are connected to sewer. It is imperative that the DEIS account for these sources and provide sewer design criteria for all new developments to be connected to the HWWTP.

Figure 5. Non-permitted wastewater discharge to the Bay



Some years ago, federal funds were provided to upgrade the Bay boat launch facilities. Before the upgrade, boat wash water flowed over the surface and into the Bay. A dry well was installed, and it drained to surface water only a few feet below the drain. Boat wash water is potable water. The wash water contains fish liquids, blood, and particulate fish waste. This wastewater may be a source of ammonia in the Bay. Washed bilge water often contains oil products. The data in Figure 5 is from the wash water surface drain at Honokohau Harbor.

Since it is obvious this wash water flows into the Bay in the groundwater, the State should have applied for an NPDES permit. Such a permit is required for any ocean discharge of wastewater, especially in waters known to be Impaired under the CWA. This requirement has been affirmed by the Supreme Court<sup>1</sup>.

#### Conclusions

The surface water and groundwater flows from the proposed development and those in the upper watershed need to be considered to ensure that further degradation of this impaired water body does not occur. This is referred to herein as a TMDL. Given the environmental ethics of Kamehameha Schools and the legal history of the Public Trust Doctrine of the State Constitution<sup>2</sup>, we suggest that these environmental impacts described above be studied for the project design and mitigated.

<sup>1</sup> County of Maui, Hawaii v. Hawaii Wildlife Fund, 140 S. Ct. 1462, 590 U.S. 165, 206 L. Ed. 2d 640 (2020).

<sup>2</sup> Kelly v. 1250 Oceanside Partners, 140 P.3d 985, 111 Haw. 205 (2006).

Keauhou Bay is a small bay inlet on Hawai'i Island and, as such, is subject to much more degradation than the open shore area of West Hawai'i. As such, the Bay requires special protections.

Sincerely,

/s/ R.H. Bennett MS, PhD, President

#### References

- Bennett, R. H. The Impaired Waters of Keauhou Bay, Hawai'i Island 2022. [https://www.youtube.com/watch?v=pk\\_-Q25bX0s](https://www.youtube.com/watch?v=pk_-Q25bX0s)
- Bishop, Renée E., William F. Humphreys, Neven Cukrov, Vesna Žic, Geoff A. Boxshall, Marijana Cukrov, Thomas M. Iliffe et al. "Anchialine" redefined as a subterranean estuary in a crevicular or cavernous geological setting." *Journal of Crustacean Biology* 35, no. 4 (2015): 511-514.
- Dailer, M, Smith, C., Glenn, C. Preventing the introduction and spread of nutrient driven invasive algal blooms and coral reef degradation in West Hawai'i, University of Hawai'i, Manoa, Grant Number NA09NOS4260242, 9/30/2011
- Dulai, Henrietta, Catherine Hudson, Trista McKenzie, Brytne Okuhata, Diamond K. Tachera, and Aly El-Kadi, 2021. Geochemical Signatures of Coastal Groundwater Reflect Groundwater Flow Lines and Land-Uses in West Hawai'i. Submarine Groundwater Discharge session, GDEs; [International Tropical Islands Water Conference](#); University of Hawaii at Manoa, Honolulu, HI (via videoconference).
- Knee, Karen L., Joseph H. Street, Eric E. Grossman, Alexandria B. Boehm, and Adina Paytan. "Nutrient inputs to the coastal ocean from submarine groundwater discharge in a groundwater-dominated system: Relation to land use (Kona coast, Hawaii, USA)." *Limnology and Oceanography* 55, no. 3 (2010): 1105-1122.
- Peterson, Richard N., William C. Burnett, Craig R. Glenn, and Adam G. Johnson. "Quantification of point-source groundwater discharges to the ocean from the shoreline of the Big Island, Hawaii." *Limnology and Oceanography* 54, no. 3 (2009): 890-904.

Rutsch, M., J. Rieckermann, and P. Krebs. "Quantification of sewer leakage: a review." *Water Science and Technology* 54, no. 6-7 (2006): 135-144.

Smith, Joseph S., Ryan J. Winston, R. Andrew Tirpak, David M. Wituszynski, Kathryn M. Boening, and Jay F. Martin. "The seasonality of nutrients and sediment in residential stormwater runoff: Implications for nutrient-sensitive waters." *Journal of environmental management* 276 (2020): 111248.

**From:** Bob B <[REDACTED]>  
**Sent:** Sunday, July 21, 2024 8:37 AM  
**To:** Keaouhou Bay@hawaiicounty.gov; Planning@hawaiicounty.gov;  
Alex.Roy@hawaiicounty.gov; 221053-01 KS Keaouhou Entitlements  
**Subject:** Keaouhou Bay EIS - Oppose This Development!

**Categories:** Green Category

To whom it may concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT in Keaouhou Bay as stated in all the different researched articles below.

Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project, because it is scientifically proven that developments pollute nearby waters constantly during development and after.

Please read these Scientific articles written by NOAA, National Oceanic and Atmospheric Administration and many other professional organizations, that have studied and proved that developments has ALWAYS polluted the water in every near coastal developed area.

**First, does this EIS have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development and golf course runoff because Keaouhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.**

**In the Endangered Species Act of 1973 Under Section 2 (b), "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.**

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

"Hawaiian monk seals are protected federally by the ESA and the [Marine Mammal Protection Act \(MMPA\)](#), as well as locally by Hawai'i Revised Statutes (HRS) [Chapter 195D](#) and Hawai'i

Administrative Rules (HAR) [13-124](#)." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

[ENDANGERED SPECIES CONSERVATION](#)

Endangered Species Act

"**Section 2. Findings, Purposes, and Policy**

**(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—**

**(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section." This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-act>**

Keaouhou Bay IS the monk seals and the green sea turtle's habitat and to allow a bungalow resort to be developed in Keaouhou Bay, that is these endangered species habitat, is to threaten these endangered species habit with golf course runoff pollution, as well as development pollution and hence, threaten their habitat, hence their lives, and goes completely against the Endangered Species Act of 1973.

The words in the Endangered Species Act states, "to conserve" and conserving the endangered species that enter into Keaouhou Bay would be to NOT DEVELOP A BUNGALOW RESORT because this would cause serious pollution runoff that would pollute the bay and endanger these already endangered species, the green sea turtle and the monk seal.

**Does this EIS have any reports on the endangered species that frequent Keaouhou Bay because this is their habitat.**

**Under the Conservation Program there should be research done on endangered species and their associated ecosystems, which is Keaouhou Bay. Because this bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.**

**"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)**

**Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species."** [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please see that developing Kamehameha Schools Bungalow Resort in Keaouhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would happen a lot more often due to taking out the natural pollution filter, that is the trees and the land that is there now.

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keaouhou Bay more severely because of the bungalow resort development's pavement. As of right now the trees and land that this development wants to clear and develop into a bungalow resort is a Natural Pollution Filter.

Please read from **Wikipedia**, "**Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean.** Other than catchbasins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20dry%20wells)

It's the pavement that this development wants to put in that will cause a lot of pollution to runoff into Keaouhou Bay because this top land that is directly below the golf course (that they want to clear) soaks in the golf course pesticides, fertilizer, weed killer... and is the BEST AND ONLY PROTECTION POLLUTION FILTER Keaouhou Bay has from the golf course pollution.

Please see this site at <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> because on page 2 it states from the Hawaii's government that **Natural Ground Cover has 10% runoff, where has development has 55% runoff.**

**These trees and land** are saving monk seals and green sea turtles habitat from the golf course pollution and this land **MUST BE PRESERVED and CONSERVED** as the natural protector for Keaouhou Bay hence, **for these endangered species habitat.**

**Under Section 2 (b) of the Endangered Species Act** - Keaouhou Bay MUST BECOME a CONSERVATION AREA for these endangered species because it is their habitat as of today, and to allow a resort development to be built above this bay would threaten the very lives of these endangered species because it will allow golf course toxic pollution and development pollution to run into these species natural habitat, which is Keaouhou Bay.

Keaouhou Bay has trees and land just under the golf course (that Kamehameha Schools wants to clear for their bungalow resort) that protects Keaouhou Bay from a lot of algae blooms because it soaks up pollution that is runoff from fertilizer, weed killer... in the golf course, and unfortunately when there is a severely heavy rain storm the land up on top of the bay has a greater runoff than normal from the golf course pollution, and pollution foam and algae blooms happen because of it.

If you clear this land, this kind of algae bloom will happen a lot more often and end up killing a lot of coral and marine life as stated in the many articles that will follow.

One of these articles is in the Global Coral Reef Alliance. They researched the reef before and after a golf course development, and even though this development is not a golf course development, it is still a development and it will also be located just under a golf course and this will allow the pollution from the golf course to come down to the bay a lot more often because the natural land that soaks up this pollution will be gone.

**Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?**

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development.. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution.. "<https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keaouhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING KEAOUHOU BAY'S ECOSYSTEM because the golf course runoff won't have the best protection which is the natural trees and land that can soak up the polluted water most of the year and polluted foam algae blooms will happen a lot more often.

Here is another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef

...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

### **Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?**

This needs to be fully known because you will be changing an entire ecosystem to build a bungalow resort. Because it rains in Keauhou Bay many nights out of the year and the land they want to clear absorbs the golf course toxins so this bay is not as severely polluted as it will be with pavement and development, and when serious storms come Keauhou Bay won't stand a chance because the land can't keep ALL golf course pollutions out during this time and pavement won't even come close.

"If there are [toxic algal blooms](#), like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

### **Federally Protected Green Sea Turtle Swim in Keauhou Bay Often**

The green sea turtle that is federally protected and can be seen in Keauhou Bay weekly. Please see the following article that states "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES

### **Why does Hawaii have a runoff problem?**

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste....

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

If you allow this development it WILL POLLUTE Keauhou Bay as the above article (that was written in 2014 because runoff water from developments were polluting the ocean even then) states, and this bay holds many sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals that have rested on the dock before and..that will ALL be harmed by the more sever pollution runoff that WILL happen because developments can't help but pollute the water nearby.

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL, and if a resort is allowed to be built, that will bring a lot more people down to Keauhou Bay and if a monk seal is resting they most likely will disturb the monk seal with their selfies because it is fully known this is now a SELFIE CULTURE.

### **Has the EIS done any research on what a high population would do in such a small area, and what will happen to the endangered species that live there because it's their habitat and a high population will change this bay forever?**

This information is by NOAA Scientist, "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media.

There's a seal on the beach! Let's go get a 'sealfie'!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In [a recent study](#), NOAA scientists used social media to monitor human activities around endangered [Hawaiian monk seals](#). They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-ery-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

### **Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?**

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, in Hilo, Puna, and there are Ocean View and Volcano housing construction projects as well. The entire Big Island has construction projects all over.

### **Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?**

Because, "Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises.

Worldwide, hotels produce almost [300,000 tonnes of waste each year](https://www.homebiogas.com/blog/hotels-waste-management/)." <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means these resources and infrastructures will be taxed even more in the near future.

Please read the below articles that prove that Big Island doesn't have the resources or infrastructure for a Bungalow Resort Development because it will increase the need for resources and infrastructure that the island doesn't have as of today.

### **Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill**

September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years. (File photo)

Of the 900 total votes in our most recent poll, which asked people to weigh in on the best way to extend the life of the Big Island's [only remaining landfill](#), all of the above was the most popular answer, garnering 274 votes, or 30%.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

#### **A county commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill**

By [Megan Moseley](#) September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

#### **Time's Up For Landfills**

##### **'Gentle' demolition strategies can help preserve resources**

**PAULA BENDER April 2, 2024**

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

#### **Drought Conditions On Hawai'i Island Prompt Water Supply Message**

by **Big Island Video News**  
on Oct 5, 2023 at 3:59 pm

**(BIVN)** – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information [from the U.S. Drought Monitor](#). There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawai%CA%BBi-island-prompt-water-supply-message/>

[U.S.](#)

**Hawaii is "on the verge of a greater catastrophic," locals say, as water crisis continues**

By [Li Cohen](#)

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to [significant droughts](#), and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the [world's largest surfing wave pool](#) opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe."

"We are in a [water crisis](#), that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawai'i, told CBS News, saying that if the reasons for this crisis aren't soon addressed, **"We may come to a point where we have to decide ... who gets water and who doesn't."**

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island parts need to be shipped and the power plant has generators that are not working and because of this, and other reasons, the Big Island needs to seriously conserve power so that everyone will have power, and if this problem of shipping parts can happen once it can happen again.

UTILITIES

UPDATE: HECO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HECO credited conservation efforts,

particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity us is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

**Big power supply problems continue to plague Hawaii island**

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

**Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.**

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

### What You Need To Know

**-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity**

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

**Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keaouhou Bay?**

**Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keaouhou Bay, what traffic and increased population studies have they done? Because they will have employees with cars, guests with cars, visitors with cars and this would range at times at least over 200 cars or more, parking above Keaouhou Bay causing serious car population because of all these added cars right next to the bay.**

Article below is from NOAA.

**What is the biggest source of pollution in the ocean?**

**Most ocean pollution begins on land.**

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or **construction sites can run off** into waterways, harming fish and wildlife

habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirty%20ocean%20is%20a%20pollutant>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

### News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a **new report** from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearly%2085%20percent,pipeline%20spills%20C%20says%20a%20new>

### The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershepherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

**Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keaouhou Bay during development?**

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behaviour of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

### OCEANS POLLUTION

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawai'i's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

#### **What is ocean noise?**

"Ocean noise refers to sounds made by human activities that can **interfere with or obscure** the ability of marine animals to **hear natural sounds in the ocean**."

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

**The Chesapeake Bay has a foundation that is trying to save it due to runoff pollution that was caused by developments, and the Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed because this bay is very small.**

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...**runoff is a significant source of harmful nitrogen pollution that continues to grow...**

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

**Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.**

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live."

<https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20places%20in%20ceparady.>

**If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay because it is so much smaller than the Chesapeake Bay.**

**Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?**

**Because the studies below show developments kill coral, marine life and zooplankton are kill and negatively affected as well, and zooplankton is the manta ray food. Manta rays are in this bay every night to eat zooplankton and sometimes they are in this bay during the day time too.**

If you allow this bay to be development you will be allowing all types of marine life to die and there is NO WAY to stop this from happening because polluted runoff rain water from developments can't be fully stopped. It is what has happened in ALL coastal developments.

Please read the Scientific proof below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawai'i. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide..."

This was the third major bleaching episode in Hawai'i over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban runoff). <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,ha%20catastrophic%20impacts%20state%2Dwide.>

This article is by the Coral Reef Alliance here in Hawai'i. "An ecosystem under threat Hawai'i's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/w/here-we-work/hawaiian-islands/#:~:text=Hawaii%20reefs%20face%20major%20global,info%20Hawaii%20CBBIs%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA. "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. **Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress.** In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawai'i". <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawai'i has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all Aquatic Life there, and even the Manta Rays that go there to eat zooplankton from the Manta Ray tours at night, and they eat it during the day in that area as well because they need to eat 5 times their body weight in zooplankton daily. Please see the cited information below.

**"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.**

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

**"Impacts are known to be highly negatively impacted by developments because, coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species."** <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,service%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,info%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,info%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

The manta rays go to Keauhou Bay every night to eat zooplankton and if you allow this development that WILL have runoff water, you WILL be causing zooplankton to be seriously affected because as this article by MarineBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that proves runoff from development in this area will hurt and kill plankton, by **Frontiers in Marine Science**, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon. The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl- $\alpha$  concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

"Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO.

<https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

Here is a research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "**Toxic Effects of Pollutants on Plankton** There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation." [https://scope.dge.camegie-science.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.camegie-science.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

The above articles show that development of Keauhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this could cause the manta ray food source to disappear and that will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on the manta ray tour for their income.

**Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?**

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, **there likely be more than 6,300 people descending on Kona..**" <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

**Where are the EIS reports on human density because this resort will increase this area in population by hundreds. Below are reports that human population destroy coral reefs.**

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the **destruction of sensitive marine habitats** such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of **sediments** into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development/#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously

increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will forsore bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regards to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20population%20and%20greater, to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%20C%20the%20research%20found,&text=The%20millions%20of%20tourists%20who,world%20C%20a%20new%20study%20said.>

If you allow this resort to be developed, you will be destroying the coral reefs in the bay because this bay is extremely small and used by a lot of locals already for fishing, canoeing, swimming, snorkeling, paddle boarding, surfing, boating...it can't afford more use by many thousands more people yearly.

If you allow Keauhou Bay to be development there will be a higher population in the bay and that will hurt the coral in the bay as well, because it's known that, "Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations

inland will lead to more runoff and siltation. Effects of human perturbations can be explored with metapopulation theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aqua culture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhahJhAnWAq453tRgN0JA1WcInR3ZoTv0PvGzA5lc\\_H00Lz4fNIP3ASnhgKRY6\\_vKLPw49dbmBYoXSg3YIMgOIGBZsandGUH7O1SLh9x5Pr3xED4KxL4T0sJlvGQ1a7ZrZr3rUbraxpodJd2AoNlSmWStx7JjEDdJpJ8OGJpx71TJWdCfXvFKJZYeNdeJ3Sw\\_dnaUg51ZlhcjPBDImmaH1.5vqT5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhahJhAnWAq453tRgN0JA1WcInR3ZoTv0PvGzA5lc_H00Lz4fNIP3ASnhgKRY6_vKLPw49dbmBYoXSg3YIMgOIGBZsandGUH7O1SLh9x5Pr3xED4KxL4T0sJlvGQ1a7ZrZr3rUbraxpodJd2AoNlSmWStx7JjEDdJpJ8OGJpx71TJWdCfXvFKJZYeNdeJ3Sw_dnaUg51ZlhcjPBDImmaH1.5vqT5Q%3D&tracking_referrer=abcnews.go.com)

**A Resort Development WILL Increase Traffic on Already Severely Trafficed Roads. Where are the traffic study reports for this EIS because with 150 rooms comes over 150 cars because you must include employee cars, as well as visitors for the people staying in the resort, and what if the guests have more than one car?**

The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side.

Allowing another resort to be developed will bring more cars that will lead to a lot more traffic that the island can't handle, please read the articles below by different NEWS companies that prove this point.

This NEWS article by Hawaii's News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Please watch their video on their link below because it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists comes more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state, This time last year Hawaii island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks...

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

“We don’t have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn’t exist here,” he added. <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is the same for Big Island. The traffic problems they talk about are the same issues here on Big Island, and this article also gives one Big Island example, “On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance.” This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

Please, watch the NEWS video below on aerial footage in Hilo because the footage shown is the same thing that is happening on Alii Drive and Queen K HWY, and for the same reasons, all of these roads only have 2 lanes.

There are 2 developments already on Alii Dr. being built as of today, and more are scheduled for this road in the near future, and Alii Dr. and Queen K HWY are the roads Kamehameha Schools Bungalow Resort will be using if approved and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems, traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well.

See the photo below that proves this point in Kona, and here is the NEWS article by KITV NEWS that talks about Hilo and the same thing is happening in Kona on the roads Kamehameha Schools wants to develop their resort, “Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution.” [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313e78e4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313e78e4c19.html).

There was a crash on Alii Dr. and when there is an accident on this road, it turns into only one lane that needs a flagger to help direct traffic. and that adds even more traffic to this already

seriously congestion road, and Kamehameha Schools wants to add a resort on this road that will increase the traffic by 100’s of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FQ5snPjii8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Please read this Path article, HAWAII COUNTY’S VISION ZERO INITIATIVE

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

“That’s just Big Island traffic,” is a common sentiment. But what if we didn’t have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?”

This was taken from Path as well as The Law of the Splintered Paddle below <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

### **The Law of the Splintered Paddle**

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing

them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law, "[ʻĀkūʻnʻʻĀwāi Mʻmalahoe](#)", or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless (especially kʻpuna and keiki) across Hawaiʻi be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawaiʻi. After being added back in 1978, the law is part of Hawaiʻi's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

-Caring for and serving one's people

-Knowing and doing what is pono (right)

-Standing for the principle that leadership privilege is earned

-Taking kuleana (responsibility) for those we serve

-Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

**The Law of the Splintered Paddle is also on Kamehameha Schools website**, so they should want to help make Big Island roads become safer and not add to the traffic and possible traffic death toll problem. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

**Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious Resource and Infrastructure issues. Please read the articles below.**

**The Big Island Doesn't Have the Resources and Infrastructure for Another Resort**

Please see the articles below because the Big Island doesn't have the resources or infrastructure to safely add another resort development on island and these other NEWS and Research articles prove this point.

1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem/>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4)"What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) "The overwhelming plastic waste Hawaii visitors leave behind By Nataasha Bourlin/Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A county commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawai'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawai'i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca-%BBi-inder-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawai'i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawai'i Department of Health." <https://www.hawaiiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "BIG ISLAND NEWS HECO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi' Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawai'i State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) "LOCAL NEWS

HECO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawai'i's water supply Hawai'i Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawai'i Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawai'i's power system from its water system, said Kawika Uyebara, deputy director of Hawai'i County's Department of Water Supply." <https://www.hawaiiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) U.S. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues  
By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "we're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) NewsHawai'i County issues mandatory 25% water restriction for North Kona  
August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawai'i Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai%CA%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

20) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnur3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnur3/hawaiian_electric_is_reporting_that_several_large/?rdt=52660)

21) "NewsHawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will damage Keauhou Bay coral and marine life and, Big Island resources and infrastructure are currently being negatively affected from the development that is on island already, and there are years of new development that have already been approved, before having safe resources and infrastructures for new developments.

With these scientifically proven articles by some of the most professional scientists in the world, they say the a serious population increase, as well as development and resort runoff that happens because of parking lots, and... with all coastal developments, it will be dangerous for Keauhou Bay to be development because it will damage the marine ecosystems in the area.

Please, save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools because all of these articles prove it would be extremely damaging to the waters at Keauhou Bay.

Thank you,

Sincerely,

Robert Berger

██████████

██████████



**From:** Maebrie Bettinardi  
**Sent:** Monday, July 15, 2024 4:40 PM  
**To:** 221053-01 KS Keauhou Entitlements  
**Subject:** Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT!

**Categories:** Yellow Category

To whom it may concern,

Please, read the scientific proof below and state in your report that this Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT in Keauhou Bay as stated in all the different reported articles below.

The Green Sea Turtle swims in Keauhou Bay weekly and the monk seal as also been seen in Keauhou Bay.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

#### ENDANGERED SPECIES CONSERVATION

#### Endangered Species Act

#### "Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section." This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-act>

The word in the very Endangered Species Act states, "to conserve" and conserving the endangered species that enter into Keauhou Bay would be to NOT DEVELOP A BUNGALOW RESORT because this would cause serious runoff that would pollute the bay and endanger these already endangered species the green sea turtle and the monk seal.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall

utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." This was taken from [https://www.capitol.hawaii.gov/hrcurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrcurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm).

Please, see that developing Kamehameha Schools Bungalow Resort in Keauhou Bay would threaten endangered species due to the unavoidable pollution runoff that would happen a lot more often due to taking out the natural pollution filter, that is the trees and the land.



Keauhou Bay has the trees and land just under the golf course (that Kamehameha Schools wants to clear for their bungalow resort) that protects Keauhou Bay from a lot of algae blooms because it soaks up pollution that is runoff from fertilizer, weed killer... in the golf course, and unfortunately when there is a severely heavy rain storm the land up on top of the bay has a greater runoff than normal from the golf course and an algae bloom happens.

If you clear this land, this kind of algae bloom will happen a lot more often and end up killing a lot of coral and marine life as stated in the two Global Coral Reef Alliance articles below because this is what happened in the Bahamas when they researched the reef before and after a golf course development, and even though this development is not a golf course development, it will be just under one and this will allow the pollution from the golf course to come down to the bay a lot more often.

This information was taken from Global Coral Reef Alliance titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution."  
<https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come because the golf course runoff won't have the best protection which is the natural trees and land that can soak up the polluted water most of the year and this kind of harmful algae bloom will happen more often.

Here is another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef

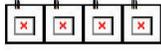
...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Heavy storms can come in and serious toxins from the golf course are able to run into Keauhou Bay causing Algae Blooms and Sea Foam even with the best filter which is the trees and land because at times tropical storms are more than any land can absorb. .

This doesn't happen that often but if you allow this Bungalow Resort development in Keauhou bay, algae blooms and sea foam will happen more often because fertilizer, pesticides, waste...will be allowed to runoff into the bay because the natural pollution filter, the trees and land will be gone and pavement can't hold as much runoff as the natural trees and land.

"If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

Algae Bloom photos taken in Keauhou Bay Feb. 14, 2024. Sea Foam in Keauhou Bay Dec. 2020.



#### Federally Protected Green Sea Turtle Swim in Keauhou Bay Often



The green sea turtle that is federally protected and can be seen in Keuhou Bay weekly. Please see the following article that states "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Even with storm drains if you allow this development it WILL POLLUTE Keauhou Bay as the above article (that was written in 2014 because runoff water from developments were polluting the ocean even then) states, and this bay holds many sea creatures such as the protected green sea turtle, spotted eagle rays,

manta rays, octopus, dolphins, fish, coral, monk seals that have rested on the dock before and...that will ALL be harmed by the more severe pollution runoff that WILL happen because developments can't help but pollute the water nearby.

Keauhou Bay is a DOCUMENTED RESTING AREA for the ENDANGERED MONK SEAL, and if a resort is allowed to be built, that will bring a lot more people down to Keauhou Bay and if a monk seal is resting they most likely will disturb the monk seal with their selfies because it is fully known this is now a SELFIE CULTURE.

This information is by NOAA Scientist, "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media.

There's a seal on the beach! Let's go get a 'selfie'!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

Has there been a detailed traffic study for the increase in cars that will be added to this already severely traffic area?

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs>.

If you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years and, "Noise Pollution

Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behaviour of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawai'i's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations.

Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations>.

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL, seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project, because it is scientifically proven that developments will ALWAYS have rain runoff that will pollute nearby waters constantly during development and after.

Please, read the Scientific articles below written by NOAA, National Oceanic and Atmospheric Administration and other professional organizations, that prove that developments have ALWAYS polluted the water in every coastal developed area.

The coral all over Hawai'i has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all Aquatic Life there, and even the Manta Rays that go there to eat zooplankton from the Manta Ray tours at night, and they eat it during the day in that area as well because they need to eat 5 times their body weight in zooplankton daily. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

If you allow this bay to be developed you will be allowing all types of marine life to die and there is NO WAY to stop this from happening because polluted runoff rain water from developments can't be fully stopped. It is what has happened in ALL coastal developments.

Please read the Scientific proof below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawai'i. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts statewide..."

This was the third major bleaching episode in Hawai'i over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers

of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban runoff). " <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event>

<https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event>

This article is by the Coral Reef Alliance here in Hawai'i. "An ecosystem under threat Hawai'i's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff.."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaii/>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status-report/docs/Hawaii\\_status\\_report\\_forw\\_b.pdf](https://www.coris.noaa.gov/monitoring/status-report/docs/Hawaii_status_report_forw_b.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019.."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban runoff, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawai'i." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The Chesapeake Bay has a foundation that is trying to save it due to runoff pollution that was caused by developments, and the Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed because this bay is very small.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, " ...runoff is a significant source of harmful nitrogen pollution that continues to grow ..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to

100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and it's rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#~:text=Besides%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay because it is so much smaller than the Chesapeake Bay.

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#~:text=Impacts%20from%20land%20based%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_coral/coral09\\_humanthreats.html#~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_coral/coral09_humanthreats.html#~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_coral/coral09\\_humanthreats.html#~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_coral/coral09_humanthreats.html#~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

The manta rays go to Keauhou Bay every night to eat zooplankton and if you allow this development that WILL have runoff water, you WILL be causing zooplankton to be seriously affected because as this article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton — a

change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem...

Here is another article that proves runoff from development in this area will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon. The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of chl-*a* concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

"Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20als%20sensitive%20to%20light%20and%20increases%20in%20predation.>

Here is a research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton. There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation." [https://scope.doe.carmegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_57-274.pdf](https://scope.doe.carmegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_57-274.pdf)

The above articles show that development of Keauhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this could cause the manta ray food source to disappear and that will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on the manta ray tour for their income.

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will for sure bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regards to the serious threat posed to coral reefs by

humankind's continued numerical increase." This is in the article by National Library of Medicine National Center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-20research/story?id=96308858#:~:text=The%20less%20people%20at%20a%20site%20are%20the%20research%20found.&text=The%20millions%20of%20tourists%20who%20visit%20a%20new%20study%20said.>

If you allow this resort to be developed, you will be destroying the coral reefs in the bay because this bay is extremely small and used by a lot of locals already for fishing, canoeing, swimming, snorkeling, paddle boarding, surfing, boating...it can't afford more use by many thousands more people yearly.

If you allow Keauhou Bay to be developed there will be a higher population in the bay and that will hurt the coral in the bay as well, because it's known that, "Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with metapopulation theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii: Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgONhahhIAnWAq453trRgN0jAIWv9mR3ZoTv0PyGzA5lc\\_H001zeHNIP3ASnhcgKrv6\\_vkLjPw49dbmBYoXSg3YlMgOIGBZsapdGUH701SLbu9x5P:3xED4Kx4t0sllvg01a72ZRt3rUbraXp0dl2AoNSmWSuxB7jEDdpI8OGIpx71TIWdCfXvFKIzYeNdcj3SwdnaUg5IzHcIFBDImmaH15vqT5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgONhahhIAnWAq453trRgN0jAIWv9mR3ZoTv0PyGzA5lc_H001zeHNIP3ASnhcgKrv6_vkLjPw49dbmBYoXSg3YlMgOIGBZsapdGUH701SLbu9x5P:3xED4Kx4t0sllvg01a72ZRt3rUbraXp0dl2AoNSmWSuxB7jEDdpI8OGIpx71TIWdCfXvFKIzYeNdcj3SwdnaUg5IzHcIFBDImmaH15vqT5Q%3D&tracking_referrer=abcnews.go.com)

A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads

The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side.

Allowing another resort to be developed will bring more cars that will lead to a lot more traffic that the island can not handle, please read the articles below by different NEWS companies that prove this point.

This NEWS article by Hawai'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Please watch their video on their link below because it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists comes more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state, This time last year: Hawaii island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks...

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is the same for Big Island. The traffic problems they talk about are the same issues here on Big Island, and this article also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

Please, watch the NEWS video from the link below on aerial footage in Hilo because the footage shown is the same thing that is happening on Alii Drive and Queen K HWY, and for the same reasons.

There are 2 developments already on Alii Dr. being built as of today, and more are scheduled for this road in the near future, and Alii Dr. and Queen K HWY are the roads Kamehameha Schools Bungalow Resort will be using if approved and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow already.

The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well.

See the photo below that proves this point in Kona, and here is the NEWS article by KITV NEWS that talks about Hilo and the same thing is happening in Kona on the roads Kamehameha Schools wants to develop their resort, "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The

State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash on Alii Dr. and when there is an accident on this road, it turns into only one lane that needs a flagger to help direction traffic, and that adds even more traffic to this already seriously congested road, and Kamehameha Schools wants to add a resort on this road, and that will increase the traffic even more.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FOSsnPDii8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Please read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path as well as The Law of the Splintered Paddle below <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law, "Kūnūwai Mōmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless (especially kūpuna and keiki) across Hawaii be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawaii. After being added back in 1978, the law is part of Hawaii's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve

-Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

The Law of the Splintered Paddle is also on Kamehameha Schools website, so they should want to help make Big Island roads become safer and not add to the traffic and possible traffic death toll problem. <https://www.khsbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-true-200-years-after-k>

Besides a resort development in Keauhou Bay causing runoffs that will severely pollute the bay as the above research and science articles have shown above causing marine life to die, it will also increase in the bay's population that will seriously add to damaging even more coral, plankton and all marine life as well, and the island has severe traffic issues already with increased death tolls rising, and a resort development in Keauhou Bay will totally increase even more traffic in these already severely congested traffic areas.

The Big Island Doesn't Have the Resources and Infrastructure for Another Resort

Please see the articles below because the Big Island doesn't have the resources or infrastructure to safely add another resort development on island and these other NEWS and Research articles prove this point.

1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled," <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste  
Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables?" BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) "The overwhelming plastic waste Hawaii visitors leave behind  
By Natasha Bourin/Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A county commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawai'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawai'i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-cas-bbi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii Department of Health. " <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "BIG ISLAND NEWS HECO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) "LOCAL NEWS

HECO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night" <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month.

14

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawika Uyehara, deputy director of Hawaii County's Department of Water Supply. " <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) U.S. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "we're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) NewsHawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawaii Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawaii, the Hawaii County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-CA%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

20) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

15

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?t=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/?t=52660)

21) "NewsHawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island.

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will damage Keauhou Bay coral and marine life and, Big Island resources and infrastructure are currently being negatively affected from the development that is on island already, and there are years of new development that have already been approved, before having safe resources and infrastructures for new developments.

With these scientifically proven articles by some of the most professional scientists in the world, they say the a serious population increase, as well as development and resort runoff that happens because of parking lots, and... with all coastal developments, it will be dangerous for Keauhou Bay to be development because it will damage the marine ecosystems in the area.

Please, save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools because all of these articles prove it would be extremely damaging to the waters at Keauhou Bay.

Thank you,

Sincerely,

Maebrie Bettinardi

**Kelli Blincoe**

Please stop and think what r u doing we dont need more development we need the structure that are here redone and remodeled. Give the wildlife their water and land not more Humans .

---

**From:** keaouhobay <keaouhobay@ksbe.edu>  
**Sent:** Monday, August 12, 2024 9:29 AM  
**To:** Tyson Bourassa  
**Subject:** Re: [EXTERNAL] Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT

**Categories:** Yellow Category

Aloha e Tyson,

Thank you for your comments concerning the Keaouhou Bay Management Plan, Draft Environmental Impact Statement. Your comments have been received and administratively recorded.

Comments received during the 45-day public comment period will be reproduced in the Final Environmental Impact Statement, and substantive comments addressed.

Since you also provided a copy to the County of Hawai'i and our planning consultant, G70, we will not be forwarding them a duplicate copy.

We appreciate your involvement and contribution to the environmental review process. Your input is invaluable in helping us develop a management plan that reflects the needs and concerns of our community.

Thank you once again for your engagement and commitment to the future of Keaouhou Bay.

Mahalo,

The Keaouhou Bay Project Team

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**From:** Tyson Bourassa <[REDACTED]>  
**Sent:** Wednesday, August 7, 2024 8:48 AM  
**To:** keaouhobay@g70.design <KeaouhouBay@g70.design>; Alex.Roy@hawaiicounty.gov <Alex.Roy@hawaiicounty.gov>; Planning@hawaiicounty.gov <Planning@hawaiicounty.gov>; keaouhobay <keaouhobay@ksbe.edu>  
**Subject:** [EXTERNAL] Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT

**CAUTION: This email is from an outside sender. Do not click on links or open attachments unless you recognize the sender and know the content is safe.**

Protect the 'Aina

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalaw Resort.

Please state in your report that a Bungalaw Resort WILL have a SERIOUS NEGATIVE IMPACT on Keaouhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalaw resort project. It is **scientifically proven** that developments pollute nearby waters both **during and after development**.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have **ALWAYS** polluted the water in **EVERY** coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development **WILL be CHANGING an Entire Ecosystem**.

#### **ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT**

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

#### **Endangered Species Act**

"Section 2. Findings, Purposes, and Policy

(4) The United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endorangered-species-conservation/endorangered-species-ac>

#### **FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED**

The green sea turtle is federally protected and can be seen in Keaouhou Bay weekly.

The following article that states: **"POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"**  
**Why does Hawaii have a runoff problem?**

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

**Allowing this development WILL POLLUTE Keaouhou Bay.** The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keaouhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen **because developments have been shown to ALWAYS pollute the water is that is nearby.**

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawaii are protected by the Endangered Species Act (ESA) and additionally protected by [Hawaii Revised Statutes Chapter 195D \(HRS\)](#) and [Hawaii Administrative Rules \(HAR\) 13-124](#)." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>.

#### **THE ENDANGERED MONK SEAL WILL BE AFFECTED**

Keaouhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keaouhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

**Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keaouhou Bay will likely be changed forever.**

This information is from a NOAA Scientist; "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie!'" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered [Hawaiian monk seals](#). They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the [Marine Mammal Protection Act \(MMPA\)](#), as well as locally by Hawaii's Revised Statutes (HRS) [Chapter 195D](#) and Hawaii's Administrative Rules (HAR) [13-124](#)." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

**Keaouhou Bay is the monk seals and the green sea turtle's habitat.** Allowing a bungalow resort to be developed in Keaouhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. **By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.** The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to **protect the land around Keaouhou Bay** from developments that destroy the habitat of these endangered species with pollution and runoff.

**Does this EIS have any reports on the endangered species that frequent Keaouhou Bay? This is their habitat and it needs to be "conserved".**

Under the **Conservation Program** there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall

utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hiscurrent/Vol003\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hiscurrent/Vol003_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hiscurrent/Vol003\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hiscurrent/Vol003_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keaouhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keaouhou Bay and the surrounding area during the building phase of this enormous project.

#### **GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS**

"The golf industry uses [approximately 50 pesticide active ingredients](#), including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keaouhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable! Please read from Wikipedia, "

Most drains have a single large exit at their point of discharge (often covered by a [grating](#)) into a canal, river, lake, [reservoir](#), sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping

system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single%20exit,https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single%20exit](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single%20exit,https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single%20exit)

The pavement from this development will cause pollution to runoff into Keaouhou Bay because this trend land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keaouhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEE-7.15.14.pdf>

where **the Hawaii'i government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keaouhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.**

**These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keaouhou Bay and for these endangered species habitat.**

Under Section 2 (b) of the Endangered Species Act - **Keaouhou Bay MUST BECOME A CONSERVATION AREA for these endangered species.** It is currently their habitat, and to allow a large resort

development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keaouhou Bay.

#### **ALGAE BLOOMS KILL CORAL AND MARINE LIFE**

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer. When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

**Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.**

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

**Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?**

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution..

" <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

**Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?**

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

**FURTHERMORE:** "If there are **toxic algal blooms**, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

**ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN**

**Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?**

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars

(likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

**The article below is from NOAA regarding motor vehicle engines and pollution to the sea.**

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife

habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines.Dirt%20can%20be%20a%20pollutant.>

**Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects**

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a [new report](#) from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2022/09/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearly%2085%20percent.pipeline%20spills%2C%20sea%20%20a%20new>

**The Impact Of Stormwater – Car Emissions**

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatersheds.org.au/blog/the-impact-of-stormwater-car-emissions/>

**NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE**

**Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?**

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation

Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

**How Does Noise Pollution Harm Marine Species?**

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often

overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>  
If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

#### **What is ocean noise?**

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.  
Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.  
These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

#### **LEARN FROM OTHERS:**

##### **RUN-OFF FROM DEVELOPMENT KILLS**

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a **lot bigger** than Keaouhou Bay. If it's being drastically hurt by runoff water from developments, Keaouhou Bay waters won't stand a chance if development above the bay is allowed. Keaouhou Bay is a much smaller ecosystem.

**This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states,** "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keaouhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban

and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carraying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keaouhou Bay due to its size and fragility.

#### **MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN**

##### **Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?**

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keaouhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is **NO WAY** to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments. Please read the Scientific articles below.

##### **It's Been Proven Developments Severely Pollute Nearby Waters**

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawai'i. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts statewide..."

This was the third major bleaching episode in Hawai'i over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban runoff)." <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,bad%20catastrophic%20impacts%20statewide.>

**This article is by the Coral Reef Alliance here in Hawaii.** "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawai%CA%BBi%20reefs%20face%20major%20global,into%20Hawai%CA%BBi%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and

development." [https://www.cofis.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forwe\\_b.pdf](https://www.cofis.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forwe_b.pdf)  
This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "**Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019...**

**We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors,**

such as tourism and urban run-off, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

**"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.**

This is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

**Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species."** <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=impacts%20from%20land%2Dbased%20sources.and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, **"Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide."** <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead.services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. **Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.**

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments.organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments.organisms%20that%20can%20smother%20corals.)

Another article by NOAA, **"Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project)**

**Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival"** [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

**It's Been Proven Resort Developments Kill Marine Life**

This article by MarinBio states, **"Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change.** Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem...."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. **This occurred in a relatively short time considering that the experiment lasted less than three weeks.** The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-*a* concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

**The ecosystem is fragile and interconnected as is stated in this article:** "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by

MarineBio. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to.light%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, **"Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage.** Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray/tour for their income.

#### **HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH**

**Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?**

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: **The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life.**" <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

**Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.**

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development/#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keaou Bay. **Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it.** Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

**It's Been Proven an Increase in Human Population Destroys Coral Reefs**  
If a Bungalow Resort is allowed to be built in Keaou Bay, it will bring a serious increase in human traffic. **"Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs.** Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS. **"This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found.** The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96380858#:~:text=The%20less%20people%20at%20a,there%20are%20the%20the%20>

[researchgate.net/publication/350065281](https://www.researchgate.net/publication/350065281) found. **text=The%20millions%20of%20tourists%20who,world%20a%20new%20stud**

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

**"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction.** Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquacultur,e%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, **"Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity.** By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, **coral reefs both attract and suffer from coastal tourism.** Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaHjAnWAq453tRgN0AJW6l9inR3Z0Tl0PvGzA5c\\_H001zcHNIP3ASnhcgKRy6\\_XkLPw49dbmBx0Xsg3YIMgQIG8ZsapidGUH7Z01SLbu9sP3xED4Kl4T0slvgQIa7Z2RR3Ubraxpod42A0NlSmWSuX87JEDdpj8OCjpx71IWDGfXFKZVeNdcj3Sw\\_dnaUg5ZlncjPBDlmmaH15yqI5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaHjAnWAq453tRgN0AJW6l9inR3Z0Tl0PvGzA5c_H001zcHNIP3ASnhcgKRy6_XkLPw49dbmBx0Xsg3YIMgQIG8ZsapidGUH7Z01SLbu9sP3xED4Kl4T0slvgQIa7Z2RR3Ubraxpod42A0NlSmWSuX87JEDdpj8OCjpx71IWDGfXFKZVeNdcj3Sw_dnaUg5ZlncjPBDlmmaH15yqI5Q%3D&tracking_referrer=abcnews.go.com)

**INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS**  
**Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?**

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

**Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?**

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. **Worldwide, hotels produce almost 300,000 tonnes of waste each year.**" <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keaou Bay. On Hawaii's Island, we are already struggling to meet the increasing need for resources and infrastructure.

**Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill**  
September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill>

**A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill**

By [Meghan Moseley](#), September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of

Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump.

Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill>

**Time's Up For Landfills**

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

**Drought Conditions On Hawai'i Island Prompt Water Supply Message**

by Big Island Video News

on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information from the [U.S. Drought Monitor](#). There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

**From a Water Supply news release:**

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawaii%CA%BBi-island-prompt-water-supply-message/>

**Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**

By [Li Cohen](#)

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to [significant droughts](#), and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the [world's largest surfing wave pool](#) opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe."

**"We are in a water crisis, that has to be made very clear,"** Wayne Tanaka, director of Sierra Club of Hawai'i, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

**UPDATE: HELCO asks for continued energy conservation**

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity us is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

**Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.**

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/the-co-customers-on-hawaii-island-asked-to-conserve-power->

**Big power supply problems continue to plague Hawaii Island**

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

**The company explained that it faces an "extremely tight" supply of power at peak use periods,** especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

**Hawaii Island customers urged to reduce electricity use through April**

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

**-if there is not enough electricity to meet demand,** Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

**FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES**

15

**A Resort Development Will Increase Traffic on Already Severely Traffic-kicked Roads. Are there traffic study reports for this EIS?**

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawaii News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "**Hawaii Island has most traffic fatalities in state.** This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

**"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here,"** he added." <https://www.khon2.com/local-news/z-fatalities-for-hawaii-island-in-march/>

**The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.** Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/langly-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: **All of these roads only have two lanes!**

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a

16

solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html). There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FQSSmPjij8>  
**Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.**

**Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:**  
A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii's Island...

- 28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees
  - 13% of pedestrians hit at 20 mph actually suffer fatality
  - 73% of pedestrians hit at 40 mph suffer fatality
  - 25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!
  - 56% of fatal crashes were the result of alcohol or drugs
  - 41% of fatal crashes occurred in light trucks and vans
  - 49% of crashes occur during the day, outside of peak traffic hours
  - Of all the crash fatalities, most were males between 20 to 24-years old.
- "That's just Big Island traffic,"** is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"  
This was taken from Path <https://hathhawaii.org/hawaii-countys-vision-zero-initiative/>

**MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC and WASTEWATER:**

- 1) **Hawaii Deals with Burgeoning Waste Management Problem**  
As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020  
"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>
- 2) **"Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawaii's Sanitary Landfill reaching capacity.**  
The West Hawaii's Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill>
- 3) **Hawaii Island Has Decades of Landfill Space But Still Faces Challenges in Dealing With Its Waste**  
Hawaii's Public Radio Published January 9, 2020 at 5:00 AM HST  
"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.  
For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of

Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

**4) "What happens to Hawaii Island's trash and recyclables?"** BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-trash-and-recyclables->

**5) "The overwhelming plastic waste Hawaii visitors leave behind**  
By Natasha Bourlin Aug 24, 2023  
Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

**6) "A County commission drafts ordinance aiming to ban recyclables at West Hawaii's landfill** By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawaii's County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill>

**7) "Hawaii's County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM**  
HST  
A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

**8) "Hawaii's Water Supply Closely Monitored As Severe Drought Continues by Big Island Video**  
NewsNow Nov 6, 2023 at 3:28 pm STORY SUMMARY  
HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca-bbi-under-severe-drought/>

**9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealahehe**  
sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024  
Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

**10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters**  
Hawaii's Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST  
There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

## 18) Hawai'i Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm  
(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.  
<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai%CA%BB%I-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

19) **"Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."**

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large\\_generators\\_are\\_experiencing\\_a\\_range\\_of\\_issues\\_and\\_may\\_lead\\_to\\_the\\_need\\_for\\_rolling\\_outages\\_if\\_supply\\_does\\_not\\_meet\\_demand/](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large_generators_are_experiencing_a_range_of_issues_and_may_lead_to_the_need_for_rolling_outages_if_supply_does_not_meet_demand/)

20) **"Hawaiian Electric asking Big Island customers to conserve power due to down generators March 25, 2024 · 11:49 AM HST**

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues. The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

## HISTORICAL AND CULTURAL SIGNIFICANCE:

### The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially Kupuna and Keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, **the law is part of Hawai'i's State Constitution today.**

It is symbolic of servant leadership, reinforcing the importance of:

-Caring for and serving one's people

11) **"Kona coast faces stark wastewater tradeoffs, Current situation**  
There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) **"HELCO restores power after initiating emergency outages on Big Island by: Elizabeth Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST**

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30. <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) **Hawai'i State News Update: Hawaiian Electric initiates rolling outages throughout Big Island**  
February 13, 2024 · 5:23 PM HST

\* Updated February 14, 2024 · 4:21 PM  
The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawai-i-island-customers-asked-to-reduce-electricity-use/>

14) **HELCO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST** Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night."

<https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) **"Here's how power outages can have repercussions for Hawai'i's water supply** Hawai'i Public Radio | By Savannah Harriman-Pote

Published February 13, 2024 at 10:59 AM HST  
Water departments on O'ahu and Hawai'i Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawai'i's power system from its water system, said Kawika Uyebara, deputy director of Hawai'i County's Department of Water Supply. " <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) **US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**  
By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) **News Hawai'i County issues mandatory 25% water restriction for North Kona**  
August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend.  
<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking Kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

**“We take that to mean that anyone who uses our roadways should be able to do so without fear of harm,” explains Tina.”**

**The Law of the Splintered Paddle is also on Kamehameha Schools website.** The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-rmg-true-200-years-after-k>

**Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.**

#### IN CONCLUSION

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keauhou Bay and "The Endangered Species Act of 1973 (ESA or "The Act"; 16 U.S.C. § 1531 *et seq.*) is the primary law in the United States for protecting and conserving imperiled species. Designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President Richard Nixon on December 28, 1973. The Supreme Court of the United States described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation". [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other. This land MUST be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come.

In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved. These issues MUST be solved before considering another resort development on Big Island.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is NOT suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen.

Please save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.

Please reject this EIS because Kamehameha Schools has NOT ACKNOWLEDGED OR ASKED thousands of Hawaiians, or Hawaiian Descendants from Keauhou Bay how they feel about developing this land, Keauhou Bay.

They have asked ONLY a few families on an island that has thousands of Hawaiian people and here is video testimony from Kupuna Kumu Lily Kong who is a Keauhou Bay descendants and her and her mother OPPOSE DEVELOPMENT: <https://vimeo.com/994680462>

Kupuna Kumu Lily Kong who was born in Keauhou Bay and she states that she is against development. She also states that her mother was against development as well. Please listen to her words in her testimonial video about Keauhou Bay on this link and know that this proves that descendant directly from Keauhou Bay OPPOSE THIS DEVELOPMENT <https://vimeo.com/994680462> and it is CULTURAL LAW THEY MUST BE HEARD AND ACKNOWLEDGED!

These laws were created, "After these legal victories, the Kohanaiki 'Ohana worked to create a new law in the state of Hawaii to require Cultural Impact Statements along with Environmental Impact Statements for all future large-scale development. Act 50, the Cultural Impact Statement Law was adopted in 2000." <https://kohanaikiokhana.org/legal-victories>

Kupuna Kumu Lily Kong also states that there are burial grounds on the land that Kamehameha Schools wants to clear and it is told that Kamehameha Schools has bulldozed sacred land in the past and Keauhou Bay's burial grounds MUST BE RESPECTED AND NOT DISTURBED!

Hawaiians locals have said that there were bones in the small cave that is at the base of Keauhou Bay. These burials need to take priority over a Bungalow Resort Development.

There are over 6,219 signatures as of Aug. 5th (these signatures grow daily) and these signatures are Hawaiians, locals and tourist and some of these Hawaiians have left comments on why they are opposing this development.

ALL OF THESE PEOPLE HAVE A RIGHT TO BE ACKNOWLEDGED AND THEIR VOICES HAVE VALUE TO BE HEARD, THESE PEOPLE MATTER AND IT IS CULTURAL LAW THEY MUST BE ACKNOWLEDGED!

Here is the petition link with thousands of Hawaiian signatures and comments opposing Kamehameha Schools Bungalow Resort Development. Please read these signatures and comments! [https://www.change.org/p/save-keauhou-bay-from-becoming-a-big-crowded-resort?utm\\_source=share\\_petition&utm\\_medium=custom\\_url&recruited\\_by\\_id=92a53560-1e91-11e5-b4ef-b94e90cedb0d](https://www.change.org/p/save-keauhou-bay-from-becoming-a-big-crowded-resort?utm_source=share_petition&utm_medium=custom_url&recruited_by_id=92a53560-1e91-11e5-b4ef-b94e90cedb0d)

Please reject this EIS because under Princess Bernice Pauahi Bishop's Will it states Kamehameha Schools are her trustees and they have a "fiduciary duty" to do what is best for THEIR BENEFICIARIES (the Hawaiian people's) and a Bungalow Resort is BEST FOR TOURISTS NOT THE HAWAIIAN PEOPLE BECAUSE THOUSANDS OF HAWAIIAN PEOPLE SINGED THE ABOVE PETITION OPPOSING KAMEHAMEHA SCHOOLS BUNGALOW RESORT.

Please reject this EIS because the Big Island DOES NOT HAVE THE RESOURCES TO PROVIDE FOR ANOTHER BIG RESORT ON ISLAND and there are 445 signatures with many comments that agree with this fact because of the factual reported articles in the Help Prioritize Big Island Developments to Keep Island's Resources Safe for ALL petition. Please read this petition, all the signatures and comments <https://www.change.org/p/help-prioritize-big-island-developments-to-keep-island-resources-safe-for-all>

Mahalo,

Tyson Bourassa

This message is the property of Kamehameha Schools and any attachments are confidential to the intended recipient at the e-mail address to which it has been addressed. If you are not the intended recipient, you may not copy, forward, disclose or use any part of this message or its attachments. If you received this transmission in error please notify the sender immediately by e-mail or contact Kamehameha Schools at webmaster@ksbe.edu and then delete this message from your system.

## Lewis Brentano

there is no indication of ADA compliant access to the building. The rendering only shows a stair entry and no indication of a ramp or lift.

My name is Lewis Brentano and I'm a Hawaii resident and I reside at [REDACTED]

The following comments on the Kamehameha Schools - Keauhou Bay Management Plan DEIS

The general area of concern is that of ADA compliant access for persons with disabilities for all elements of the proposed management plan.

It is apparent that the most recent plan does address some of the accessibility issues that I and others raised in the initial comments. And for that, those both with disabilities are grateful. However, there are at least five other areas that appear inadequately addressed or not addressed at all in terms of ADA compliant access in the plan.

1. ADA compliant access from the north side of the KOA to the south side - A first area of concern is the access for disabled people from the north side of Keauhou Bay to the south provide access to all the facilities on the southside. Today, anyone in a wheelchair or with mobility challenges has to go to Ali'i Drive and walk all the way to the Outrigger hotel to get to the south side of bay - a distance of over mile and a half on a busy road.

It appears from the renderings of the improvements to Old Kona Road that there will be a multi-use pathway parallel to the road itself that would go from north side of the bay to the south side, but it still appears to be a long distance compared to providing ADA compliant access from the Kamehameha III road cul-de-sac, directly across the area above the beach on the bay, to the South side. I do not see in the plan any indication of pedestrian access from the cul-de-sac to the other side of the bay where the heritage center would be.

2. ADA compliant access to the lobby of the lodging area. There is no evidence or statement about making the lodging lobby accessible—all the rendering drawings and comments show two different sets of steps to go from street level to the lobby entrance. If such accessibility is intended, it needs to be stated directly in obviously in your plan.

3. ADA Compliant access to lodging units. The third area would be the lodging units themselves as depicted at best 1/3 of the units would be accessible in terms of entry, and there is no mention of building accessible, bathrooms, bedrooms, etc., in the actual units. This seems to be an issue that must be addressed early on in the design phase.  
Excuse me it's time for breakfast my part

4. Too few ADA complaint Handicapped Parking places The area of accessibility is related to number accessible. Parking places stated in the document and in the plans — you know that you will build 126 parking places for the retail area, but only five handicap places this is too small, a percentage of spaces, especially given likelihood that a good number of visitors and tourists would most likely be senior citizens. I'm sure there are ADA guidelines on percentages of handicap parking places, but would it seem 15 to 20% of spaces should be a minimum out of the 126 total.

5. ADA compliant access to Heritage Center. In the rendering and description of the heritage center

## Jan Brinkman

Thank you for your personal meeting September 22, 2022 addressing the Keaouhou Management Project. Sadly we are faced with a choice today, we have the power to consume everything and we have for centuries-but for the 1st time in our history we are faced with the repercussions of that behavior. We have so little left to replenish and we need to ensure sustainability for future generations. I am here to ask for more, encouraging KS to over see the stewardship of proper management reform. I am asking KS to get ahead of the imprint of construction and development to off set, guard against {Kahu} and prepare ahead for hazards to replenish unknown damages and lead as an example. KS has exceptional leadership and resources with the ability to pool resources with the state, federal government and scientists for ocean policies. I'm here to ask for more. > The topics I covered with KS in the amount of short time I was allowed, I'm taking the liberty to go a bit more in depth with my concerns: > Traditionally, the Ahupua'a runs from the mountain and continues from the shoreline to the outer edges of our coral reefs. This organized distribution of resources established sustainability of the population. This last century we have fallen short of any bond of developing our oceans with our lands. The responsibility to replant, renature, reseed and protect our forests {Kahu} needs to be diversified back to our oceans as our land is managed. I am asking for more, trial programs of increasing coral into the Keaouhou Bay by 30% with replantment, replanting and reseeded to reforest our coral reefs. Hawaii has 410,000 acres of coral, the majority of this states coral reefs have died including 25% of the fish and critters. High tech mapping (ReFugia) using coral response to illumination has shown 50% loss of reef and fish due to beaching, pollution, development and fishing activities. NOAA estimates total economics value of Hawaiian coral reefs at 33.57 billion dollars. Our reef protect our shorelines and provide recreation and livelihood to the tourist industry. I am sadly humbled at the sight of tourists excitement to see nothing but empty skeletons of these coral animals. The Hawaiian Chants of Kumu Lipo clarifies that life began with the emergence of a coral polyp, it became more complex and developed into a community. Science also supports coral polyps were the first of life. Our coral reefs and reefs through out the world are threatened with extinction by 2050. Hawaii has 80% of the coral reefs in the USA. Causing further accelerated coral loss is elevated by carbon dioxide levels on this planet. Reef ecosystem destruction result with 25% of all marine species being at risk, while the assisted economic loss will expose people to decreased food resources and security of sustainability. > The number one problem at Keaouhou Bay has always been the sewage system. I find it alarming that the state does not address our sewage pipe problems that run into our oceans and easily passes that off to development companies. To remain triple AAA waters without periodic alerts of high bacteria counts not only in Kona but all islands. I also beg the state to apply for the 'Infrastructure Act' to ensure all islands can renew a safe transition to a modern healthy sewage pipe systems. > I want more intricate details of protection for water run-off. Working in the evening at he bay it was very common to have sudden heavy rains. Keaouhou rain belt is 35" a year. The first phase of the project with the sewage system and trailer parking remains a big threat to our bay with coral kill from silt and sediment. The Red Hill 1250 project was very destructive and damaging to our ocean and marine livelihood. Robert Kim directed me as a witness in court against Bud Quitiquit and four mainland lawyers. I remained giving my testimony for over an hour. The court gave me a copy of the testimony that I did daily trips to Red Hill and my underwater experience of damaging changes that I observed. If anyone would like to read what I witnessed during that construction time and the lawyers questions please contact me to review the unnecessary stress and permanent damage that affected the Red Hill area. A reminder one inch of

rain per acre 27,154 gallons with a weight of 113 tons, not including the grade or slope, no containment walls, water guides or barriers can contain this situation. Plans should be made for construction during dry season along with the daily burden of removing any disrupted soil to another location. Tested soils on all acres are crucial to foresee areas that need extra care and replanting. The 2 primary soils are Waiaha cobble medial silt loam and Waiaha medial silt loam. > Also mentioned was Blue Carbon, which is on the financial market to sustain projects of restoration. I mentioned to KS with all their coastal access through their land holdings Blue Carbon could make these types of projects feasible using their school to educate with restoration projects along our coastal waters using carbon credits. 83% recycle of carbon is in our oceans. Other examples I touched on were Maui aquarium which has the seeding ability for Keaouhou Bay and Waikiki aquarium has also pioneered efforts to cultivate coral and have shipped over 5,000 corals grown in Hawaii. We just recently welcomed a new coral restoration project at Otec. NOAA and volunteers have projects in Kane'oh'e Bay, Mauna Loa Bay and South shore waters. Besides NOAA and many other state and federal programs to pool resources with KS, I know this can be done. Puerto Rico collected 10,000 pieces of broken coral and replanted with a 90% success rate after their 2017 hurricane. > Having a 100 ton Master Coast Guard Captain License for over 40 years I was blessed with over a dozen years Captaining out of Keaouhou Bay. I also had the pleasure of logging over 10,000 scuba dives along the Kona Coast and also exploring Palau and New Zealand. In the 90's we had a Keaouhou Bay clean-up, being active with this project I had my daughter and many other school students that were eagerly efficient. In the 70's our storms caused damage to our corals and we, the dive company would replace and replant coral of many species even if it was the gesture was turning them upright so the polyps could feed. January 80 storm was devastating and we took the 'build and they will come' hold true to marine life. Even though displacement occurred the fish would move to the coral heads, egg cases continued to be laid, protection was contained for molting crabs and lobsters, eels, shells and nudibranch could also take shelter. The most important was the coral polyp could survive and there circle of replenishment continued through displacement. We also placed fragile pieces of coral into lobe coral for support and actually they gave great support and seemed to fuse around the bases. Through hurricane Iwa and Iniki our ecosystem was already stressed as we went through great development along the Kona coast with construction, pollution, population and more water activity stress. The ocean acidification with warmer waters have left us in dire need. It is my vision and dream to have Senator Dr. Tim Richards present a bill to the floor to aid and assist our oceans with any coastal development making replenishment and restoring critical habitat mandatory. We must ask more from all coastal resorts to be participants in ocean projects and reform including tourist attractions participation. > I am here to ask everyone for 'more' in this critical time for our coral reefs and oceans. Our obligation to our future generation is that they are equally entitled to our natural resources. Keaouhou Bay and the surrounding land could also be embraced for our future generations to decide what is best for their future generation.

**From:** Janet Brinkman  
**Sent:** Saturday, August 3, 2024 9:26 PM  
**To:** 221053-01 KS Keaouhou Entitlements  
**Subject:** Re: Keaouhou Management Plan

**Categories:** Yellow Category

> On Aug 3, 2024, at 8:41 PM, Janet Brinkman <[REDACTED]> wrote:

>  
> From  
> > Captain Jan Brinkman  
> > [REDACTED]  
> > Aloha Marissa Harman,

> > Thank you for your personal meeting September 22, 2022 addressing the Keaouhou Management Project. Sadly we are faced with a choice today, we have the power to consume everything and we have for centuries-but for the 1st time in our history we are faced with the repercussions of that behavior. We have so little left to replenish and we need to ensure sustainability for future generations. I am here to ask for more, encouraging KS to over see the stewardship of proper management reform. I am asking KS to get ahead of the imprint of construction and development to off set, guard against (Kahu) and prepare ahead for hazards to replenish unknown damages and lead as an example. KS has exceptional leadership and resources with the ability to pool resources with the state, federal government and scientists for ocean policies. I'm here to ask for more.

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>  
> > Captain Jan Brinkman  
> > [REDACTED]  
> >

## Justin Broderick

This project will have a negative impact on the wildlife of Keaunohou bay, and the surrounding areas. I oppose this plan and would like to see the bay stay the way it is. The infrastructure in Kona is already out of date and cannot support more people. The life of the land is perpetuated in righteousness.

## Shantee Brown

Please do not develop more unnecessary luxury building around Keaunohou Bay. I support the needed upgrades for public use and cultural preservation + education. The current hotel and other lodgings are more than adequate. We do not have enough drinking water for more tourists in Kona and I cannot imagine hundreds more people in Keaunohou + He'eia Bay. Also, run off from the development will contaminate the bay.

---

**From:** Shantee Brown <[REDACTED]>  
**Sent:** Wednesday, August 7, 2024 9:26 PM  
**To:** 221053-01 KS Keaouhou Entitlements  
**Subject:** Proposed Bungalow Resort Development  
**Categories:** Yellow Category

Please do not develop more unnecessary luxury building around Keaouhou Bay. I support the needed upgrades for public use and cultural preservation + education. The current hotel and other lodgings are more than adequate. We do not have enough drinking water for more tourists in Kona and I cannot imagine hundreds more people in Keaouhou + He'eia Bay. Also, run off from the development will contaminate the bay.

Aloha,  
Shantee Brown  
Kaillua-Kona

## Marjorie Bryant

I own a condo a 5-min walk from Keaouhou Bay and spend as much time as I can there each year. I do not rent it out. I intend to reside there full time once my house in CA sells. I received your notice in the mail a couple years ago re the Keaouhou Bay Draft EIS.

I am concerned about three things. First, I am concerned about the nēnē who hang out on the golf course, in an area adjacent to this proposed development (the first/ ninth fairway and the far end of the driving range on Kona Country Club). I am attaching pictures, which I also sent to nānē.org a while back. I and my neighbors first observed the nēnē there in fall 2023. They seem to hang out there every day. Fall through Spring. How will you ensure that the nēnē do not get disturbed during your years of construction activities? I don't know what to suggest to mitigate this. All I know is nēnē need all the help they can get to expand their range.

My second concern relates to increased traffic. How will you mitigate the extra noise and air pollution from construction truck traffic along Ali'i Dr and Kaleiopapa St by my condo (Keaouhou Akahi 78-7030 Ali'i Dr)? And also to/from your resort and commercial area once built? My unit is within 20 feet of the Ali'i Dr roadway, and this extra noise and pollution will greatly impact me. I suggest creating permanent sound barriers along Ali'i and Kaleiopapa St by our condo complex for the noise, and limiting construction activities to weekdays and conventional work hours. I don't know what to suggest for the air pollution, but I hope your bright minds can come up with something. Also, our driveway is just past a blind corner on Ali'i Dr where the speed limit of 35 mph is glibly ignored by drivers, most of whom speed by at 45+ mph. How will you mitigate the increased danger turning left (or right) out of my condo onto Ali'i Dr as a consequence of your increased traffic? Also, how will you ensure pedestrian safety in this area with your increased traffic? It's a popular walking, running and biking route. I use it regularly. I suggest lowering the speed limit to 25 mph on Ali'i in our area and installing speed bumps on Ali'i in our area to mitigate both these factors. But drivers regularly drive around the speed bumps on Kaleiopapa St, so this won't be enough. For the latter reason, I also suggest an actual physical barrier - like a low white curb or posts along the white line that denotes the shoulder - be installed on both Ali'i Dr in our area and Kaleiopapa St to protect pedestrians. I wouldn't want your organization to be exposed to a lawsuit should anyone get hurt or die in this area.

My third concern is the increased heat and lowered precipitation in my local climate that will be caused by your proposed development, because you will be razing a majority of 29 acres of trees and vegetation and replacing it with black pavement and other hardscape. The science behind this concern is well documented. From <https://www.epa.gov/heatislands>: "Conventional paving materials can reach peak summertime temperatures of 120–150°F (48–67°C), transferring excess heat to the air above them and heating stormwater as it runs off the pavement into local waterways." Trees make rain, and razing forests decreases rain (supporting science for this sentence is listed at end of this letter and marked by \*). Our area has been in a drought for years. It is not a good idea to decrease precipitation in an area of drought. And of course we all know mature trees provide cooling shade.

Increased heat from your proposed development will radiate up to my condo, which is right across the golf course above the project site. This will affect my health, and that of my neighbors, most of whom are kupuna like me - not only when we're at home, but when we go out for our daily walks down to Keaouhou Bay. Further, it is a documented scientific fact that our climate and oceans are warming increasingly rapidly. Your development will exacerbate this locally. It's going to heat not only the air but the water in the bay.

I do not believe this impact - the extra heat and what it will do to our health and the health of the bay and the health of our local ecosystem - can be successfully mitigated. That said, here are some suggestions. I suggest using alternate paving materials that do not generate heat. I also suggest leaving mature shade trees on site in place - and intact. And I suggest planting shade trees (at a maximum distance of 30 ft apart) in your parking lots - and all over your property, including the commercial/retail areas on Ehukai St and Kaleiopapa St. And I suggest planting greenscape on the roofs of your buildings - all buildings, including the commercial/retail areas on Ehukai St and Kaleiopapa St.

Please also address for me: how will you ensure dedicated public access to the shoreline during construction? And how do you aim to preserve the peaceful and shady nature of the shoreline on site, both during construction and after, so local people like myself can continue to enjoy it? Because it is not true that local folks are uncomfortable there. Lots of local folks (both Hawaiian and non-Hawaiian) go daily, to fish and cool in the water and paddle and picnic and play volleyball. And on the weekends it's crowded with local folk. I see this with my own eyes. Everyone parks on the north side of the bay on Kamehameha III Rd, where there is plenty of parking, always.

And a final note. I do not understand why this project is necessary. Why permanently adversely alter the local environment around this sacred site when: (1) your organization owns an existing mall a half mile away. Keaouhou Shopping Center with plenty of space to accommodate the many tour operators you wish to relocate off Kaleiopapa St; (2) a 350-room hotel already exists on Keaouhou Bay (The Outrigger) and it never gets full, and restaurants in it have struggled and closed over the years; and (3) we have a labor shortage on island - Aloha Gas and other businesses at Keaouhou Shopping Center like Kenichi Pacific restaurant and KTA grocery and Longs Drugs can't even find enough employees (they are all short-staffed) and have cut operating hours and have had constant help wanted signs out for years now and even offer hiring buses) - so there isn't anyone to fill the jobs you will create? Are parking lots and new buildings and roads really a fitting way to honor Kamehameha III's birth site?

This latter question is a genuine question, not meant to be provocative. It seems to me that there are three problems at Keaouhou Bay that your organization is trying to solve, and frankly they aren't all your responsibility to solve. But they all have simpler, less costly and less environmentally detrimental solutions.

One problem is: street-based mauia tour operators on Kaleiopapa St operate illegally with no overhead and thus have an unfair competitive advantage over legitimate mauia tour operators like Sea Quest who are based in bayside buildings on your property. I'd like to make the point that it is the County of Hawaii whose responsibility it is to solve this problem. Doing business on the side of the road has always been prohibited by Hawaii state law, but in the past, it was not commonly enforced. The State of Hawaii, however, now has an explicit law on the books and has begun to expect enforcement: Hawaii Revised Statute 264-101 (2023). The County of Hawaii should be sending enforcement folks down to Kaleiopapa St each night to enforce this law, until the problem goes away.

The second problem at Keaunohu Bay it seems you are trying to solve: the volume of cars parked on Kaleiopapa St (going on snorkel tours during the day and mauia tours at night) cause that busy street (which is gateway to the state boat ramp and The Outrigger Resort) to be unsafe for pedestrians. This safety problem also has a simple solution: the County of Hawaii should make Kaleiopapa St a no parking zone. Keaunohu Bay business patrons could then be directed to park in the large grassy area at the corner of Ehaikai St and Kaleiopapa St, which your organization owns and characterizes as a parking area. And patrons could also be directed to park on Kamahaemaha III Rd in one of the several dirt parking lots your organization owns over there on the north side of the bay, where many folks already do park, and to park on Kamahaemaha III Rd itself, which has sidewalks for pedestrians. It seems to me that your organization could charge for these parking privileges in its existing lots and make money.

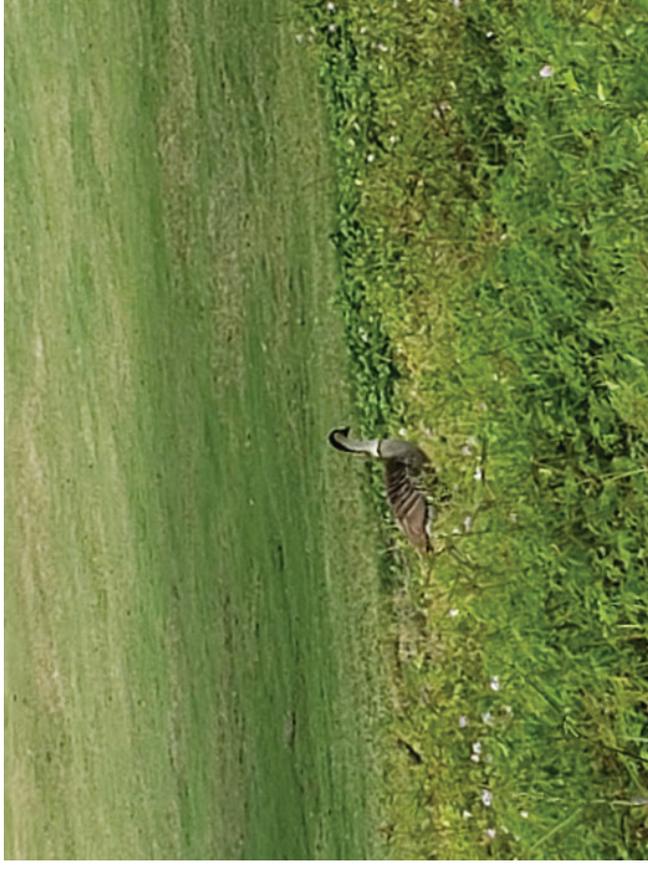
Third problem it seems you are trying to solve is: the buildings you own by the bay (where Sea Quest operates) regularly flood during storms, and king tides with high surf. Perhaps all that is necessary to solve this problem is to build a reinforced wall around the structures, to keep the sea out, rather than build brand new structures elsewhere. There may be other problems at the bay you are trying to solve too, and whatever they are, I suggest finding a less environmentally destructive way to solve them, because no one wins when we destroy the one thing we rely on for life: our environment, our land and sea.

In any case, it seems to me that these three solutions I suggest are much more cost effective - and less environmentally destructive - than your current proposal. Razing forests and building more parking lots and buildings seems the least cost effective and most destructive and detrimental to everyone's future.

Thank you.

\* References for trees make rain:

- [1] Shukla, J and Mintz, Y. 1982. Influence of Land-Surface Evapotranspiration on the Earth's Climate Science 19 Mar 1982: 1498-1501. Vol. 215, Issue 4539, pp. 1498-1501  
DOI: 10.1126/science.215.4539.1498 (<https://www.science.org/doi/10.1126/science.215.4539.1498>)
- [2] David Ellison, Cindy E. Morris, et al. 2017. Trees, forests and water: Cool insights for a hot world. Global Environmental Change 43 (2017) 51–61 (<https://www.sciencedirect.com/science/article/pii/S0959378017300134>)
- [3] Jonathan S. Wright, Rong Fu, John R. Worden, Sudip Chakraborty, Nicholas E. Clinton, Camille Risi, Ying Sun, Lei Yin, 2017. Rainforest-initiated wet season onset. Proceedings of the National Academy of Sciences Aug 2017, 114 (32) 8481-8486; DOI: 10.1073/pnas.1621516114 (<https://www.pnas.org/doi/10.1073/pnas.1621516114>)
- [4] Spracklen, D., Arnold, S. & Taylor, C. 2012. Observations of increased tropical rainfall preceded by air passage over forests. Nature 489, 282–285 doi:10.1038/nature11390 (<https://www.nature.com/articles/nature11390>)
- [5] Nair et al-2011-Journal of Geophysical Research-Atmospheres (1984-2012) The role of land-use change on the development and evolution of the west coast trough, convective clouds, and precipitation in southwest Australia (<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2010JD014950>)
- [6] Charles Massey – Farming in the Middle East and Australia: Lessons about a brittle climate. ABC Saturday Extra (<https://www.abc.net.au/radionational/programs/saturdayextra/farming-in-the-middle-east-and-australia--lessons-about-a-brittle/10794674>)
- [7] Aragão, L. The rainforest's water pump. Nature 489, 217–218 (2012). (<https://www.nature.com/articles/nature11485>)









Nicholas Buhbe

**From:** Nick Buhbe <[REDACTED]>  
**Sent:** Tuesday, August 6, 2024 6:07 AM  
**To:** 221053-01 KS, Keaouhou Entitlements  
**Cc:** alex.roy@hawaiicounty.gov; Keaouhoubay@ksbe.edu  
**Subject:** Comments on Keaouhou Bay Management Plan, DEIS  
**Attachments:** NBuhbe Comments\_Keaouhou DEIS 2024 0805.pdf  
**Categories:** Yellow Category

Mr. Roy  
Please find attached a comment letter in response to the Keaouhou Bay Management Plan (KBMP) (the "Project"), Draft Environmental Impact Statement (DEIS) publication. My comments are submitted as a private citizen with more than 30 years of experience in marine and aquatic environmental assessment. I have visited the project site personally and had the opportunity to engage the cultural resources and enjoy recreational opportunities that Keaouhou Bay offers.

The focus of my comments is the substantial lack of the necessary foundational studies along the shoreline and within the bay to assess impacts of additional hardscape in an area already impacted by development. Without such context, an appropriate assessment of the Project impacts and appropriate mitigation measures cannot be determined. My fear is that the project will exacerbate existing documented impacts to Hawaii's cultural heritage at the site and further endanger the public and natural resources unique to Keaouhou Bay.

Thank you for the opportunity to comment on this matter,  
Best regards,  
Nick

--  
Nick Buhbe, MS  
[REDACTED]  
[REDACTED]  
[REDACTED]



August 5, 2024

County of Hawaii Planning Department  
Aupuni Center  
101 Pauahi St., Suite 3  
Honolulu, HI 96720  
Attn: Alex Roy, via email to [Alex.Roy@hawaii-county.gov](mailto:Alex.Roy@hawaii-county.gov)

Re: Comments on Kamehameha Schools, Keaouhou Bay Management Plan, Draft Environmental Impact Statement, Volumes I and II (Prepared by G70, June 2024)

Mr. Roy,  
I am submitting these comments in response to the Kamehameha School, Keaouhou Bay Management Plan (KBMP) (the "Project"), Draft Environmental Impact Statement (DEIS) publication. As an initial matter, I have degrees in biology and marine biology, as well as a professional career of over 30 years with a wide breadth of experience in assessing environmental impacts, including impacts of contaminants and sedimentation on biological resources in aquatic and marine systems. I have a deep appreciation of Hawaiian culture and the natural resources which bless Keaouhou Bay in particular. I have visited the project site and had the opportunity to engage the cultural resources and enjoy recreational opportunities Keaouhou Bay offers. My comments include technical aspects of the DEIS, and are informed by personal observations. The focus of my comments is the substantial lack of the necessary foundational studies upon which to base an assessment of the Project impacts and appropriate mitigation measures. My comments follow.

#### A. Background Expertise

My curriculum vitae is attached. Note that my experience, though focused in California, includes an extensive risk assessment program at Pearl Harbor, Oahu, which assessed sediment quality and effects of runoff on biological resources, as well as work at Midway Atoll involving contaminant impact assessments.

#### B. DEIR Review and Comments

My personal experience at Keaouhou Bay was one of enjoyment, but also disappointment at the state of the "beach" shoreline and marine biological resources thereby. On a cursory level, these appear degraded. Based on my visual observations, conditions dramatically improved toward the mouth of the Bay as one would expect with increasing water circulation, but the pattern also suggests that existing developments adjacent to Ka'iiliinehe Beach impact the quality of marine biological resources. As noted above, my overall conclusion is that the DEIS lacks key basic foundational studies of existing conditions within the bay necessary to assess the potential impacts of the project, and the KBMP therefore also fails to assess potential mitigation measures appropriately. Finally, the KBMP makes statements regarding sustainability, but is clearly focused on commercial development and an expanded footprint of development. While the Project might generally improve the human experience of cultural resources in particular (which I applaud), other sustainability elements of the KBMP are lacking, especially considering that the shoreline has already been highly modified by development and, in my opinion, has been in a state of degradation for decades.



**NICK BUHBE, M.S.**  
**CEO & PRINCIPAL SCIENTIST**



Development is, in my experience, a one-way path which cannot easily be undone. Keauhou Bay is an important and unique resource on many levels. Managing shoreline development needs to be undertaken with great care now to ensure that resources are better protected for future generations, and not degraded further.

Thank you for the opportunity to comment on the DEIS.

Best Regards,

Nicholas Buhbe  
Principal and Founder, Mission Environmental LLC

Encl.  
Curriculum Vitae (N. Buhbe)

**Citations:**

D'Angelo, C. and J. Wiedenmann. 2014. Impacts of nutrient enrichment on coral reefs: new perspectives and implications for coastal management and reef survival. *Current Opinions in Environmental Sustainability* 7: 82-93. April.

Rogers, C.S. 1990. Responses of coral reefs and reef organisms to sedimentation. *Marine Ecology Progress Series* 62:185-202. April 5.

Silbiger, N., J., CE. Nelson, K. Remple, J. K. Sevilla, Z.A. Quinlan, H.M. Putnam, M.D. Fox, and M.J. Donahue. 2018. Nutrient pollution disrupts key ecosystem functions on coral reefs. *Proceedings of the Royal Society B, Biological Sciences*. 285:1880. June 6.

Tuttle, L.J. and M.J. Donahue. 2022. Effects of sediment exposure on corals: a systematic review of experimental studies. *Environmental Evidence* 11, Article Number 4. February 7.

Mr. Buhbe is a senior scientist with 30 years of experience specializing in aquatic biological resources, sediment testing, assessment of water quality, ecological risk assessments, preparation of environmental planning compliance documents, and wetland-related project work. His portfolio includes biological, chemical, and physical evaluations of water and sediments in bays, estuaries, and riparian settings.

Mr. Buhbe has conducted surveys of a wide range of biological habitats including southern California kelp forests, coastal reefs, eelgrass beds, and sediment infauna. He is familiar a wide range of sampling techniques and protocols, including toxicological evaluations and experimental design. Mr. Buhbe is currently working on several projects in San Diego Bay. He is also actively focused on project work assessing watershed impacts to downstream receiving waters under the Clean Water Act and analogous state laws, working to resolve conflicts between competing beneficial and/or land uses, and has managed a multi-year programmatic assessment under Regional Board oversight.

Mr. Buhbe brings three decades of experience incorporating toxicological evaluations into multidisciplinary studies. Over the past several years, his work has focused on multiple projects with legal aspects, often evaluating water and sediment quality against ecological benchmarks, and navigating projects through complex permitting, compliance and legal issues. As such his technical work is focused on the project or program manager level. Mr. Buhbe founded Mission Environmental in 2017 and fills the CEO role at the company. Between technical and company roles, he is familiar with managing staffing resources, budgets, and schedules throughout a project's arc, including evaluating feasibility of project scopes of work, estimating costs, preparing proposals, reviewing contract language, performing work, interacting with project stakeholders, preparing documents, completing and filing regulatory applications and reports, performing technical reviews, and invoicing. His role at Mission Environmental includes not only preparation of project cost estimates, but also implementing projects within budget and schedule constraints.

Mr. Buhbe's expertise also extends to participation on the Pacific Chapter and hemispheric programs of the Western Dredging Association (WEDA), part of a worldwide organization focused on the dredging aspects of coastal development. He is currently participating on WEDA's Environmental Commission. Mr. Buhbe is a Past President of the WEDA Pacific Chapter and has contributed several presentations at annual meetings over the years.

Descriptions of select recent project experience is included below, followed by a list of additional project experience.

**EXPERTISE**  
Environmental Monitoring  
Water Resources  
Dredging & Sediment Evaluations  
Ecotoxicology  
Ecological Risk Assessment  
Natural Resource Management  
Aquatic & Wildlife Biology/Ecology

**EDUCATION**  
M.S. in Biology, San Diego State University, 1997  
B.A. in Marine Biology, University of California, Santa Cruz, 1992

**CERTIFICATIONS**  
NAUI Open Water II SCUBA Diver, 1989; Research Diver  
NOAA Caulerpa Surveyor  
Transportation Worker  
Identification Credential (TWIC)  
OSHA 40-Hour HazWOPER (Section 1910.120), Initial: 17 Feb. 1995; updated annually  
OSHA DOT Training

**PROFESSIONAL AFFILIATIONS**  
Western Association of Dredging, Pacific Chapter Past President;  
National Environmental Commission Member  
Society of Environmental Chemistry and Toxicology (SETAC), So. Cal. Chapter – Past Member  
California Estuarine Research Society – Past Member

## SELECT PUBLICATIONS

Mr. Buhbe has prepared numerous technical notes, monitoring and informational reports, comment responses, and permit applications which both synthesize information and support defensible technical conclusions. In addition, Mr. Buhbe has participated in several professional or technical groups charged with developing industry- and site-specific recommendations. Publications arising out of those groups include but are not limited to:

Lake San Marcos Joint Parties. 2021. Phosphorus Inactivation VI Interim Report [June 2021] Alum Application, Upper San Marcos Creek Watershed and Lake San Marcos Nutrient Management Program. [Lead Author]. December. Available at: [https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo\\_report/1633670270/110000003261.PDF](https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/1633670270/110000003261.PDF)

Central Dredging Association. 2019. Sustainable Management of the Beneficial Use of Sediments.

Information Paper. [Contributing Author] [online] Available at:

<https://dredging.org/media/ceda/ceda.org/documents/ceda/2019-05-bus-ip.pdf>

Central Dredging Association. 2019. Assessing the Benefits of Using of Contaminated sediments.

Position Paper. [Contributing Author] [online] Available at:

<https://dredging.org/media/ceda/ceda.org/documents/ceda/2019-05-busc-pp.pdf>

Daniel B. Stephens & Associates, Inc. 2016. Remedial Investigation/Feasibility Study Report, Upper San Marcos Creek Watershed and Lake San Marcos, CIWQS ID: 5290404, Geotracker Site ID: TI10000003261. Prepared for Citizens Development Corporation and Public Agency Defendants. September 30. [Lead Reviewer on behalf of Citizens Development Corporation].

Nautilus Environmental, LLC. 2014. Tijuana Estuary Sediment Fate & Transport Project Biological Resources Monitoring Report. Prepared for Southwestern Wetland Interpretive Association in collaboration with Border Field State Park, Tijuana River National Estuarine Research Reserve, and California Coastal Conservancy. [Lead Author].

## SELECT PROJECT EXPERIENCE

**LAKE SAN MARCOS INVESTIGATIONS & RESTORATION STRATEGIES, San Marcos, CA**

Nick is currently program manager for biological and hydrological investigations of Lake San Marcos, a 303(d)-listed nutrient-impaired water-body in Southern California, in fulfillment of Regional Water Quality Control Board (RW) Investigative Order. No. R9-2011-0033 and in support of ongoing implementation of a legal settlement. Mr. Buhbe was the senior managing scientist for both compliance and mediation settlement aspects, and developed investigation Work Plans, Sampling and Analysis Plans (SAP), Quality Assurance Program Plans (QAPP), and Health and Safety Plan (HASP) associated with the Order (approved by the RW in 2012) and subsequent work. Under Nick's leadership, the consultant team has completed activities required for the RI/FS, including development of a comprehensive dataset comprising lake water quality, bathymetry, sediment-water nutrient interactions, and various other ecological conditions. The RI/FS was approved by the RW in 2017, and pilot studies evaluating lake and watershed phosphorus inactivation, aeration of deep lake waters susceptible to anoxia, and watershed actions are now underway. Nick has supervised and/or directly conducted monthly lake monitoring since 2012, prepared quarterly monitoring reports, formulated technical workplans and reports assessing lake remediation pilot studies, and is responsible for forecasting work, preparing budget estimates, and invoicing. He has prepared and delivered presentations to the general public (at community workshops) and to the RW (both regulatory status updates to staff and at Board hearings). The project is transitioning

from an investigation and remedial action pilot study phase under legal mediation to an implementation phase under a trusteeship, in part due to his long history with the project and deep understanding of the project objectives, Nick anticipates continued involvement to monitor compliance and attaining remedial action objectives.

**AUSTAL USA DRY DOCK PERMITTING, San Diego Bay, San Diego, CA**

Nick served as the Project Manager for a site-wide sediment quality assessment and dredge permitting effort for a dry dock deployment. The project is a collaborative effort of the client and the U.S. Navy, and involves input of multiple technical stakeholders. The sediment assessment revealed the need for significant upland disposal, and permitting incorporated modification of the initial dredge footprint, revised placement/disposal strategy, marine resource mitigation, site engineering, and other elements. Nick prepared a project scope and budget, managed the sampling, analysis, and reporting components of this program, and interfaced directly with the client advising of the implications of sediment quality, engineering constraints, and marine biological resource impacts. Nick was the project proponent/agent working with the Regional Water Quality Control Board, U.S. Army Corps of Engineers, and U.S. Navy for in-water permitting and project certification. Permits and certifications were received and project construction began in 2023.

**MARINE BIOLOGICAL ASSESSMENT OF AMPLIFY ENERGY PIPELINE OIL SPILL, San Pedro Channel, CA**

Nick was selected as a potential expert witness concerning a natural resource damage assessment and/or spill liability case brought by Amplify Energy against the owners of the MSC Donit. His work included review of U.S. Coast Guard/Federal Bureau of Investigation survey documentation; development of and participation in a field survey using divers and remotely operated vehicles; and review of expert witness reports, video survey results, and photographic documentation. From a technical perspective, his role was to evaluate pipeline biota conditions and evaluate successional patterns of marine habitat; his review informed several theories regarding the cause of the oil spill.

**POND 20 RESTORATION PROJECT, San Diego Bay, CA**

Pond 20 is a historical salt production pond in south San Diego Bay that the San Diego Unified Port District is seeking to convert low-function salt panne habitat to a highly productive and functional salt marsh and intertidal habitat. Conversion of habitat typology relies on significant excavation of materials. Nick designed and implemented a sediment characterization plan to evaluate the feasibility of placement options for the soils & sediments at the site. In addition, his knowledge of southern California estuaries and bay habitats informed the ecological design, the restoration plant palette, and project strategy. As task lead, Nick was responsible for developing and adhering to a budget for the sediment feasibility study effort. Subsequent work consisted of working with an engineering firm to independently assess the feasibility of the broader project objectives.

**SAN DIEGUITO RIVER ESTUARY SOL 2 RESTORATION PROJECT, Del Mar, CA**

The 22<sup>nd</sup> Agricultural District (operator of the Del Mar Race Track) was responsible for the restoration of several acres of upland to functional saltmarsh as mitigation directed by the California Coastal Commission. The Phase 2 site was challenging due to extremely high soil salinity levels at the design grade which threatened the survival of restoration plantings (observed at Phase 1). Mr. Buhbe was the project manager for the project and reported to the project Restoration Ecologist, ensuring that implementation of the plan was fulfilled appropriately and that necessary measures were undertaken to ensure mitigation success. During his tenure on the project, Nick worked closely with the construction team, irrigation and planting contractor, landscape architect, and Commission staff to ensure that milestones were met and the project remained on budget.

#### **R.E. STAITE ENGINEERING MARINE SEDIMENT QUALITY ASSESSMENT, Southern CA**

Nick served as the Project Manager for the pre-dredging feasibility study and a site-wide sediment quality assessment for a waterfront development site. The site is currently the subject of several broad investigative orders due to heavy metals, pesticide, and PCB contamination at the leasehold, which is included in the "BAE Systems and SDG&E Northern Sediment Delineation Investigation" program. Chemistry data was compared against ecological effect guideline values commonly used in the permitting and regulatory processes for dredge material disposal suitability analyses. Nick prepared a project scope and budget, managed the sampling, analysis, reporting components of this program, and interfaced directly with the client advising of sediment quality implications. Contaminant concentrations were assessed across the site (laterally) and vertically in the sediment column to evaluate potential avenues to achieve development objectives while minimizing constraints presented by the contamination. Data is also informing the Regional Water Quality Control Board-lead cleanup process.

#### **WATERFRONT CONTAMINATION SOURCE, TRANSPORT, AND FATE EVALUATION, San Diego, CA**

The industrialized waterfront of east-central San Diego Bay is the subject of several cleanup and abatement and/or investigation orders due to sediment contamination. Nick was responsible for evaluating data pertaining to the Northern Investigation Area, which is known to be contaminated with organic and metal pollutants. On behalf of R.E. Staite Engineering, Nick has been project manager for field investigations and forensic evaluations pertaining to the extent and magnitude of contamination, possible sources, and contaminant transport mechanisms at the site. Responsibilities have included preparing scope and budget documents, implementing scopes of work, drafting data reports and technical memoranda, and interfacing with regulators including the San Diego Regional Water Quality Control Board.

#### **REYNOLDS DEMINERALIZATION PLANT DISCHARGE MONITORING & EXPANSION PLANNING PROJECT, National City, CA**

The Reynolds Plant discharges concentrated brine from a reverse osmosis process into the Sweetwater River, a tributary to San Diego Bay. As part of a NPDES permit renewal process and a planned expansion of the plant, Mr. Bubbe was responsible for preparing the initial (2007) and final (2012) 5-year monitoring plans, liaising with the RB with respect to the monitoring program design, and providing guidance as to relative impacts of brine disposal alternatives. As part of the project impact assessment, the team modeled how brackish discharges affected salinity in the Sweetwater River Estuary. In addition, Mr. Bubbe was responsible for monitoring of estuarine vegetation, benthic macroinvertebrates, water quality, and macroalgae to assess the potential impact of the discharge in a highly sensitive environment. The project is now fully operational.

#### **TIJUANA ESTUARY SEDIMENT FATE AND TRANSPORT PROJECTS, San Diego, CA**

Several State agencies sponsored an evaluation of the effects of beach replenishment with materials containing less than 80 percent sand. The project used before-after-control-impact (BACI) statistical tools to evaluate shorebird foraging behavior and beach marine invertebrate abundance, and demonstrated that pre- and post-construction conditions at impact sites were indistinguishable from pre- and post-project conditions (for birds) and from naturally occurring populations at nearby unimpacted sites (for beach invertebrates). Demonstration of a lack of biological resources impacts, along with the coastal process research conducted in parallel by a team of USGS researchers, indicate that use of materials containing less than 80 percent sand for beach replenishment may be a viable tool for shoreline management in California.

#### **WOODBRIDGE WATERFRONT PARK RESTORATION & ECOLOGICAL RISK ASSESSMENT, Woodbridge, NJ**

As part of a larger remediation project at the Woodbridge, New Jersey site, the NJDEP identified West Lake sediments as a source of potential ecological risk in need of additional assessment due to elevated levels of contaminants of potential ecological concern. Mr. Bubbe was responsible for overseeing the implementation of a toxicological survey which tested sediment contaminant loads and related them to acute and chronic toxicity testing results. Mr. Bubbe was also responsible for evaluating the data from statistical and ecological risk perspectives and identified specific thresholds which may function as the basis of ongoing remediation. In addition, Mr. Bubbe prepared sections of a report corresponding to the toxicological evaluation, and functioned as a key quality assurance reviewer for the entire supplemental ecological risk report, including trophic/food web modeling.

#### **LOS ANGELES REFINERY MARINE TERMINAL SURFICIAL SEDIMENT CHARACTERIZATION, Los Angeles, CA**

ConocoPhillips was required to delineate the extent of possible effects of an upland NAPL plume upon the nearshore area of the LAMT leasehold. Mr. Bubbe managed marine field sampling, toxicological analyses, and benthic macroinvertebrate community evaluation under strict Health and Safety and Quality Assurance regimens. In addition, Mr. Bubbe drafted the project-specific Sampling and Analysis Plan, coordinated and led field efforts, and supervised report preparation to evaluate the potential causes of varying degrees of impact. The delineation effort included the use of multiple lines of evidence (LOE) in the assessment, including chemistry, biology, and toxicology, to assess surficial sediments according to the California Sediment Quality Objectives (SQO) protocol. The project was completed on schedule and under budget.

#### **CONFIDENTIAL CLIENT, Pacific Northwest**

Nick was responsible for a detailed evaluation of sources and components of total polycyclic aromatic hydrocarbons with respect to their propensity for toxic effects, likelihood of mobility, and environmental persistence. The evaluation included data quality review and assessment of PAH ratios to evaluate sources and potential lines of evidence to support liability allocations.

#### **POWER PLANT SEDIMENT INVESTIGATION, San Francisco, CA**

The confidential Power Plant site is known to exhibit soil and sediment contamination related to historical manufactured gas plant operations. Mr. Bubbe participated on a team conducting a comprehensive ecological evaluation of sediment contamination in the nearshore area along San Francisco Bay. Tasks included participation in the sampling effort planning and implementation phases, including mobilization of personnel to assist with field work. Mr. Bubbe was also tasked with preparing the Emergency Response Plan (ERP) for the field effort, installing a protective boom as a provision of the ERP (through a subcontractor), and coordinating and contracting analytical laboratory services, data validation services, drilling contractors, a sampling vessel, marine taxonomists, and specialized seafloor sampling equipment. Mr. Bubbe served as project manager through several phases of the project, liaised directly with the clients on matters related to project strategy, and interacted with a team of third-party field observers representing interests of a local jurisdiction. Mr. Bubbe oversaw a survey of the benthic macroinvertebrate community, which utilized the California SQO (sediment quality objectives) approach to assess the level of ecological disturbance across the site, and a separate field effort associated with collecting bioaccumulation and toxicity information specific to the site.

## ADDITIONAL PROJECT EXPERIENCE

Listed in approximate reverse chronological order.

Molina Center Mercury Discharge Evaluation, Long Beach, CA  
 Alta Road Site Cleanup and Geotechnical Investigations, San Diego, CA  
 Marina Infrastructure Permitting Support, San Diego, CA  
 Shipyard Sediment Quality Investigation Reporting, San Diego, CA  
 Waterfront Contamination Fate and Transport Assessment, San Diego, CA  
 Waterfront Development Contamination and Best Management Practices Review, San Diego, CA  
 Pfister Chemical Facility Waterfront Sediment Risk Assessment, Ridgefield, NJ  
 Riparian Mitigation Site Evaluation and Planning, San Diego, CA  
 Browne Park Pond Restoration Project, Queens, NY  
 Tijuana Estuary River Valley Parcel Erosion Control Plan, San Diego, CA  
 Passaic River Estuary Discharge Impact Assessment, Confidential Client, NJ  
 Upland Biological Resources Survey, Maui, HI  
 Coastal Mitigation Strategy Consulting, Confidential Client, US Gulf Coast  
 Camp Pendleton Base-wide Utility Infrastructure EIR, NAFAC, Camp Pendleton, CA  
 Southern California Harbor Sediment Baseline Assessment, Confidential Client, CA  
 Southern California Bioassessment Working Group, CA  
 Santa Margarita River Watershed & Estuary Monitoring, USMC Camp Pendleton, CA  
 Upper Santa Margarita River Watershed Monitoring, Riverside, CA  
 Navy Fuel Pier 180 Replacement Dredge Material Characterization, San Diego, CA  
 Richmond Inner and Outer Harbor Sediment Characterization, Richmond, CA  
 U.S. EPA National Coastal Condition Assessment Laboratory Audits, Nationwide  
 Marine Group Sediment Testing, WSSI Inc., San Diego Bay, CA  
 EIR for the Recommissioning of Lease PRC 421, Goleta, CA  
 Port of Long Beach Pier G Sediment Characterization, Long Beach, CA  
 Western Anchorage Sediment Storage Site Characterization Project, Long Beach, CA  
 On-Call Environmental Projects for the Port of Los Angeles, Los Angeles, CA  
 NAS North Island Carrier Quaywall Stabilization Project Sediment Characterization, Naval Facilities Engineering Command, U.S. Navy, Coronado, CA  
 Southwest Marine Buildings Demolition Project EIR, Los Angeles, CA  
 Spring Canyon Riparian Mitigation Site Construction and Monitoring, San Diego, CA  
 Watershed Pollutograph Chemistry-Dominguez Watershed Site, San Pedro, CA  
 Koehler Kraft Boatyard Redevelopment, Koehler Kraft Company, San Diego, CA  
 Escondido Creek Bioassessment Monitoring Program, City of Escondido, CA  
 Port of LA Channel Deepening Project Water Quality Monitoring, Los Angeles CA  
 IR Site 10 Intertidal Marine Resources Survey (San Diego Bay), NAS North Island, CA  
 Spartina Mitigation Site Identification, Caltrans District 11, San Diego, CA  
 Back Channel Navigation Safety Improvements Sediment Characterization, Long Beach, CA  
 Beach Replenishment Biological Resource Surveys, Aircraft Carrier Homeporting Project, U.S. Navy Southwest Division & San Diego Association of Governments, CA  
 San Onofre Nuclear Generating Station Marine Biological Monitoring Studies, Southern California Edison, San Onofre, CA  
 Coronado Bridge Eelgrass Construction Monitoring Surveys, Caltrans, Coronado, CA  
 National City Marine Terminal Wharf Extension Sediment Characterization, San Diego, CA  
 Aircraft Carrier Homeporting Project (CVN U.S.S. Stennis), LA-5 Ocean Dredged Material Disposal Site

Long-Term Ecological Monitoring, U.S. Navy, NAS North Island, CA  
 Deep-Draft Power-Intensive Pier Replacement Project Sediment Characterizations (P-327, Phases I, II, and III), U.S. Navy, San Diego, CA  
 Midway Atoll Ecological Risk Assessment Project (Navy CLEAN CTO 136), USN Pacific Division, Midway Island NAS, HI  
 Port of Los Angeles Pier 400 Phase II Water Quality Monitoring Project, Los Angeles, CA  
 Aircraft Carrier Homeporting/Main Channel Deepening Water Quality Monitoring, San Diego, CA  
 NASSCO and Southwest Marine Sediment Characterization Studies, San Diego, CA  
 Long Beach Naval Complex Environmental Impact Report/Environmental Impact Statement, (Marine Biology and Biological Resources sections), Long Beach, CA  
 Chollas Creek Dredging Water Quality Monitoring Project, San Diego, CA  
 Newport Dunes Dredging Water Quality Monitoring Project, Newport Beach, CA  
 Convair Lagoon Water Quality Monitoring, San Diego, CA  
 Pearl Harbor Naval Complex Ecological and Human Health Risk Assessment (CTO 206) Field Sampling, Navy CLEAN, USN Pacific Division, Pearl Harbor, HI  
 Convair Lagoon Eelgrass Surveys, San Diego, CA  
 San Onofre Nuclear Generating Station (SONGS) Radiological and Marine Resources Monitoring, San Onofre, CA  
 Midway Atoll Baseline Benthic Macroinvertebrate Analysis, USN Pacific Division, Midway Island NAS, HI  
 Richmond Harbor Benthic Macroinvertebrate Survey, Richmond, CA  
 San Onofre Mitigation Reef Studies, San Onofre, CA

## Rob Bussell

Upon my thorough review and analysis of the Draft EIS and supporting documents, a very well informative and complete document covering (no doubt) a wide variety of 'sensitive' // 'concerning' areas of interest. Clearly, the documents demonstrate a high level of awareness and mitigation measures, that realistically reassures the public that KS has a great development in the best interest for Kona. Therefore, it's my opinion that this is a worthy project endeavor that has my full support and endorsement.

## Lindsey Caldwell

I am emailing to voice my opposition to the planned resort by Kamehameha schools at Keaunohou Bay. I am tired of seeing our coastlines be used for the rich and for tourists. I am tired of seeing the minimal recourses and the limited infrastructure being prioritized for the rich and tourists. The worst part is most of these lands are either apart of the Hawaiian homes system, bishop estate, Kamehameha schools or Liliuokalani trust, or once were. Sold to the highest bidder or used for the benefit of people who only bring further gentrification. The kids currently graduating from Kamehameha schools may never get to live and thrive in their ancestral lands because of them no more than 17\$ an hour which couldn't even find their rent let alone a future mortgage. And the unfortunate who couldn't afford Kamehameha or pass the requirements for admittance get an even shorter stick in all of this. Where's the development for the Hawaiian people? I don't even need to read the environmental impact because it's the big picture I'm looking at. That once again Hawaiians are selling out, that money is more important than the people. That tourism is more important than reconnecting with Hawaiian roots. Why not turn this area into a place that benefits people, feeds people, heals people, instead of a place that only heightens tensions, limits resources further and pushes Hawaii and it's people further from its heart. Save Keaunohou Bay, don't gentrify it!!! Perpetuate what Kamehameha schools and all these other Hawaiian organizations were really meant to be, instead of using them to deepen pockets of people who do nothing for Hawaiians. No More Resorts!!!!

## Noelani Campbell

Note: A PDF Format of the comments below have been uploaded as a file

Aloha e Alaka'ina no Keaouhou Bay Project,

I am a Native Hawaiian and also a member of Keaouhou Canoe Club. As a Nā Ho'okama a Pauahi and a Nā Poki'i Scholarship recipient, my awardee kuleana has spanned over forty-five years. The Trust had only asked of me one thing in return for six years of tertiary education; to give back to Pauahi's children. This request has been an important part of the fabric woven throughout my life abroad, on the Mainland, and maka'āina Hawai'i.

As a kumu of Hawaiian Studies for the DOE (grades K-5), as a former kumu for Kamehameha Schools Kilohana Program, and in the education of keiki, 'ōpio, and the general membership at Keaouhou Canoe Club, I have continued to serve the Princess's legacy in the preservation of Hawaiian culture and values intended to empower her children. I express the following with much aloha for all that I have been given.

In the Keaouhou Bay Management Plan EIS Draft, I would like to make two clarifications:

1. Keaouhou Canoe Club is a non-profit 501c3. We are not a commercial operator.
  2. The "hostile and hostile atmosphere" (Sec. 3.2.3 paragraph 3) is indeed a daily occurrence however Ka'ili'ilimehe Park which has managed access is not the only locale of managed practices and stewardship.
- Having been a lessee of Kamehameha Schools (formerly Bishop Estate) for forty years, KCC has always been a Hawaiian racing club. The canoe club has promoted Hawaiian canoe koa racing, Hawaiian culture, and the preservation of the koa canoe. Traditional practices and education thrive with concentrated focus on local area children ages 7-18.
- Supporting that kuleana, are numerous mālama kōkua; individuals who preserve and uphold tenets of 'ohana wa'a with particular care of the koa canoe. Adornments of offering and protection are prepared by highly skilled lei makers (KCC members) where cultural propriety is applied in the harvest, preparation, and integrity of the lei produced. Kanaka Maoli are at the helm of cultural rearing and coaching of our youth and supported in all ways Hawaiian by member kōkua. Piko and pule are at the center of 'ohana wa'a which is conducted at practices, races, and relevant gatherings. By the start of the first regatta, with guidance, piko is led entirely by nā poki'i for the leadership, coaches, parents, and the entire racing program (keiki, 'ōpio, kāne, wāhine).

The statement "Keaouhou Bay offers a unique opportunity to infuse culture and education" (Sec. 3.2.3 paragraph 6) speaks to a potential that has already been realized and is ongoing at KCC. Education (historical, wahi pana, ali'i, nā mea wa'a, mo'olelo) and mālama 'Āina Pauahi are at the forefront of the canoe club's kuleana; steward the children, steward the land.

The recreational paddling program is a component of KCC's endeavors. We do not conduct any

for-profit activities as do the other recreational entities operating at Keaouhou Bay. There is no signing up for tours; only pre-planned educational/outreach opportunities for the community and the community at large. This component provides an opportunity to further create reverence and respect for those who are not familiar with Keaouhou's historical significance.

Our pa'a Culture Committee has worked diligently in providing these avenues of learning. Various resource specialists are invited to present aspects of Hawaiian ancestral knowledge, history, social/economic organization, resource management/sustainability, and the implications of rights and privileges viewed through a Hawaiian lens (kuleana).

'Āina Pauahi has provided me the physical, spiritual, and cultural connections necessary to be a worthy keeper of nā mea Hawai'i and the ha'i mo'olelo kūpuna a me nā ali'i o Keaouhou. As Kamehameha Schools reimagines this corridor for the future, seeds have long been planted and sprouted with profound yield especially in our strong youth racing program. Our keiki and 'ōpio are ma'a to traditional koa canoe practices of care, adornments, and protocols as well as all aspects of 'ohana wa'a.

As we prepare for the coming months/years, we remain, committed to Pauahi's legacy established in our Mission Statement and terms of our lease agreement.

I feel a great sense of responsibility to those who came before me, who gave me the inheritance of place and connection, and all the sacrifices they made for me to be here. It is for this reason, I remain accountable to the children who will inherit all that is Keaouhou.

'Owau nō me ka ha'a ha'a,  
Noelani Campbell

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‘Owau nō me ka ha‘a ha‘a,

Noelani Campbell

## Mary Kealoha Campbell-Droze

A boutique hotel would wipe out what is currently a lush, verdant green space leading down to the Bay, which is acting as a buffer for run-off and other pollutants. There is already enough development in the area; we need to preserve whatever green we can.

## Shelley Carey

I support Kamehameha Schools (KS) comprehensive plan to improve Keauhou Bay. This sacred and historical place has been sorely neglected for too many years. Too many Hawaiian historic and sacred lands have vanished due to poor management and limited forethought. KS's Keauhou plan is almost a decade in the making and hasn't been without community and stakeholder input. For those that have read the plan will understand this project is meticulously detailed to honor the legacy of Kauikeouli and the future of the Kānaka 'Ōiwi.

The plan itself is based in stewardship and education. The plan highlights Kauikeouli's birth site and utilizing current commercial buildings to increase cultural education. The restoration of Ho'okūkū Pond, Mo'ikeha Cave, and removal of invasive plants and reseeding only native plants should be commended by all. Additionally, rerouting and relocating commercial activities away from sensitive cultural sites will create a more harmonious and balanced use of the area.

Due to current limited infrastructure, there are limited community and recreational opportunities, the new plan will increase use of the shoreline, improve parking, and route vehicle traffic to the old Kona Rd. Additionally, an increase of revenue from low impact lodging and commercial center will further increase the KS educational mission. The KS Keauhou Bay Plan should be approved without reservation.

This was taken from <https://www.fisheries.noaa.gov/national/ENDANGERED-species-conservation/ENDANGERED-species-act>

**FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED**

The green sea turtle is federally protected and can be seen in Keauhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.clemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Allowing this development WILL POLLUTE Keauhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keauhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawaii's are protected by the [Endangered Species Act \(ESA\)](#) and additionally protected by [Hawaii Revised Statutes Chapter 195D \(HRS\)](#) and [Hawaii Administrative Rules \(HAR\) 13-124](#)." This information was taken from this site <https://dlmr.hawaii.gov/dar/species/sea-turtles/>

**THE ENDANGERED MONK SEAL WILL BE AFFECTED**

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keauhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keauhou Bay will likely be changed forever.

This information is from a NOAA Scientist; "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie!' That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species."

**From:** TOM CAREY <[REDACTED]>  
**Sent:** Sunday, July 28, 2024 8:09 PM  
**To:** 221053-01 KS Keauhou Entitlements; Alex.Roy@hawaicounty.gov; Planning@hawaicounty.gov; Keauhoubay@ksbe.edu  
**Subject:** Save Keauhou bay  
**Categories:** Yellow Category

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keauhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keauhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keauhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.

**ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT**

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keauhou Bay.

The Green Sea Turtle swims in Keauhou Bay weekly and the monk seal has also been seen swimming and resting in Keauhou Bay. Both of these marine animals are on the endangered species list.  
Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought. <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-sealife>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keaouhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keaouhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keaouhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keaouhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keaouhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keaouhou Bay and the surrounding area during the building phase of this enormous project.

#### GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keaouhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dr%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dr%20wells)

The pavement from this development will cause pollution to runoff into Keaouhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keaouhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where the Hawai'i government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keaouhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keaouhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keaouhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keaouhou Bay.

#### ALGAE BLOOMS KILL CORAL AND MARINE LIFE

The trees that are slated to be cleared for the development further protect Keaouhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development.. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution... " <https://www.globacoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cav-abaco-bahamas/>

If you allow a Bungalow Development in Keaouhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAOUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globacoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keaouhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

FURTHERMORE: "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

#### ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keaouhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keaouhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keaouhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%20Nearly%2085%20percent,pipeline%20pills%2C%20says%20a%20new>

The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershedrds.org.au/blog/the-impact-of-stormwater-car-emissions/>

#### NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keaouhou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation->

[districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.](#)

What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

#### LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow..

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20open,parly.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

#### MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide..."

This was the third major bleaching episode in Hawai'i over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off). <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,head%20catastrophic%20impacts%20state%20wide.>

This article is by the Coral Reef Alliance here in Hawaii. "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawaii%20reefs%20face%20major%20global,into%20Hawaii%20CA%20BBi's%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status-report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status-report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269058>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantaradvocates.com/how-much-plankton-do-mantas-eat/>

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem...

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This

occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-*a* concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE.12/SCOPE.12\\_3.6.chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE.12/SCOPE.12_3.6.chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

#### HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20pop,od%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denier%20coastal%20populations%20and%20greater,fo%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in *Nature Sustainability*." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,ther%20are%2C%20the%20research,th%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20study%20said.>

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manita night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so

fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S00652988120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNha,hj,AnWAq453RgN0jA,W9E9jnR3zoTv0P,CzA5tc,H00JzcHNIP3AShngcKRy6\\_vkLPw49dbmBYoXSg3Y1MgOIGBBZsnpdGUH7O1SLbn9x5P3xEPD4Kx4T0sJNgQla7ZZR1GfUbraxpoddJd2AonISmWSukB7JEDdpJjSOGJpx7JTJWdCfXvFKJIZYcNdGj3Sw\\_dnaUg5ZlhcjPBDlmmah15xqt50%3D&text=king,referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNha,hj,AnWAq453RgN0jA,W9E9jnR3zoTv0P,CzA5tc,H00JzcHNIP3AShngcKRy6_vkLPw49dbmBYoXSg3Y1MgOIGBBZsnpdGUH7O1SLbn9x5P3xEPD4Kx4T0sJNgQla7ZZR1GfUbraxpoddJd2AonISmWSukB7JEDdpJjSOGJpx7JTJWdCfXvFKJIZYcNdGj3Sw_dnaUg5ZlhcjPBDlmmah15xqt50%3D&text=king,referrer=abcnews.go.com)

#### INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost [300,000 tonnes of waste](https://www.homebiogas.com/blog/hotels-waste-management/) each year." <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keauhou Bay. On Hawaii's Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawaii's landfill September 17, 2023

The West Hawaii's Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawaii landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill

By [Megan Moseley](#) September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Kaahumanu Highway in Waikoloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

Time's Up For Landfills

Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

Drought Conditions On Hawai'i Island Prompt Water Supply Message

13

by Big Island Video News  
on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely. Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information [from the U.S. Drought Monitor](#). There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawai%CA%BBi-island-prompt-water-supply-message/>

[U.S.](#)

Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By [Li Cohen](#)

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to [significant droughts](#), and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the [world's largest surfing wave pool](#) opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe."

"We are in a [water crisis](#), that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawai'i, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

UPDATE: HELCO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

14

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity us is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/hcco-customers-on-hawaii-island-asked-to-conserve-power>

Big power supply problems continue to plague Hawaii Island

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

15

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES

A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawaii News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state. This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

16

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added. <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example. "On the Big Island, the mayor had to issue an [emergency order](#), shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: All of these roads only have two lanes!

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8423-8313ed8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8423-8313ed8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=-FQSmFDjiI8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

**MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC and WASTEWATER:**

1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Wastc360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.wastc360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawaii's Sanitary Landfill reaching capacity.

The West Hawaii's Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawaii's Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-trash-and-recyclables->

- 5) "The overwhelming plastic waste Hawaii visitors leave behind  
By Natasha Bourlin Aug 24, 2023  
Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-19286076.php>
- 6) "A County commission drafts ordinance aiming to ban recyclables at West Hawaii landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM  
Hawaii County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>
- 7) "Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST  
A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>
- 8) "Hawaii Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY  
HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai-ca%BBi-under-severe-drought/>
- 9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024  
Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>
- 10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST  
There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>
- 11) "Kona coast faces stark wastewater tradeoffs, Current situation  
There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>  
We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.
- 12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST
- 13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM  
The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>
- 14) HELCO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/hcco-releases-conservation-alert-for-big-island/>
- 15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST  
Water departments on O'ahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month.  
But what does the power grid have to do with the water supply?  
It is impossible to separate Hawaii's power system from its water system, said Kawika Uyehara, deputy director of Hawaii County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>
- 16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues  
By Li Cohen  
Updated on: April 11, 2024 / 8:23 AM EDT / CBS News  
In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."  
<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>
- 17) News Hawaii County issues mandatory 25% water restriction for North Kona  
August 7, 2023 · 5:21 PM HST  
A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend.  
<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>
- 18) Hawaii Water Supply Closely Monitored As Severe Drought Continues  
by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai%CA%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/?rdt=52660)

20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

#### HISTORICAL AND CULTURAL SIGNIFICANCE:

The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, the law is part of Hawai'i's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

The Law of the Splintered Paddle is also on Kamehameha Schools website. The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.kisbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-true-200-years-after-k>

Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.

#### IN CONCLUSION

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keauhou Bay and "The Endangered Species Act of 1973 (ESA or "The Act"; 16 U.S.C. § 1531 et seq.) is the primary law in the United States for protecting and conserving imperiled species. Designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President [Richard Nixon](#) on December 28, 1973. The [Supreme Court of the United States](#) described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation".<sup>[1]</sup>" [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other. This land MUST be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come.

In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved. These issues MUST be solved before considering another resort development on Big Island.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is NOT suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen.

Please save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.

Mahalo,

Dorothy S Case



**Ocean planet Images**

**[www.oceanplanetimages.com](http://www.oceanplanetimages.com)**

I am responding to the Kamehameha Schools EIS for Keauhou Bay as a regular user of the Bay and as a member of the Keauhou Canoe Club.

My concern with the EIS is related to Section 4.5. I swim in the bay each week. We enter at the "beach" which is on the North side of the end of the rock wall, and at the end of Kamehameha III Rd. If there is a heavy rain, which is common for Keauhou, the water there becomes cloudy from the runoff from the water flowing down this road and bringing the dirt and debris. The drainage opening at the end of Kam III in the circular turnaround area becomes backed up and floods the whole end of the road. Mitigating this runoff problem must be in the future plans.

The other issue I am very concerned about is how the wastewater is going to be taken care of. Sewage has always leaked into the Bay. For many years one of the members of the Keauhou canoe club, Dennis McHatta, collected samples of the water in the bay very scientifically. There was an OC 16 TV program made about this showing how after a rain, the water becomes turbid. He proved that sewage was leaked as well. My understanding is that there are very old pipes for sewage, water, electric, and telecommunications lines running along the shoreline that are at risk or are already compromised. The first thing that **MUST** be done before any construction or development is done, is to relocate these lines to a safer place. We already are experiencing higher tides and king tides that tell us the seas are rising. This is an opportunity to correct these issues of water lines, sewer lines, communication lines, to protect the fragile waters of the bay.



The proper authorities must be involved to correct these issues.

When we first moved to Keauhou in 2011, I remember snorkeling in this bay and seeing beautiful coral of all colors. There were 50-60 manta rays on the night tours. Yellow tang were everywhere. And now when we swim, we do not see any tropical fish or any beautiful coral. And after a rain, the water is cloudy and sometimes smelly.

I implore you to take care of the basic needs of the bay first, before going forward on any new development.

Mahalo for your attention to this matter. Signed: *Dorothy S Case*





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**From:** Jeff Caulfield <[REDACTED]>  
**Sent:** Tuesday, July 16, 2024 6:01 AM  
**To:** Alex.Roy@hawaiicounty.gov; 221053-01 KS Keauhou Entitlements  
**Cc:** Rebecca Melendez; David Smith  
**Subject:** Keauhou Bay Management Plan Draft: EIS - Comments  
**Attachments:** Keauhou Bay Historical Marker 1890.jpg; Keauhou Bay Nautical map.docx

Yellow Category

**Caulfield & James LLP**  
[REDACTED]  
[REDACTED]

July 15, 2024

County of Hawai'i, Planning Department  
Attn: Alex Roy  
Via Email Only To: Alex.Roy@hawaiicounty.gov  
Aupuni Center,  
101 Pauahi St., Suite 3  
Hilo, HI 96720

Re: Kamehameha Schools, Keauhou Bay Management Plan Draft Environmental Impact Statement

Dear County of Hawaii, Planning Department,

I am submitting these comments to the Kamehameha School, Keauhou Bay Management Plan Draft Environmental Impact Statement. As an initial matter, I have over 30 years experience in the preparation of environmental impact reports and statements and after my initial review of the subject report it appears to be the most incomplete and deficient report that I have ever reviewed. However, before getting in to substantive comments I'll introduce myself.

**A. Background Expertise**

I graduated from UC Santa Barbara with a degree in environmental studies and from law school from the University of the Pacific, McGeorge School of Law. During undergraduate studies I worked at the Institute of Crustal Studies Vadose Monitoring Laboratory conducting cutting edge research in the movement of pollutants within the vadose zone (defined as the zone of soil between the surface of the earth and groundwater.) Prior to becoming an environmental attorney, I worked for several years as an environmental consultant. I also previously clerked for the United States Department of Interior, Regional Solicitors' Office and the California Department of Fish and Game, Legal Advisors' office. For the past 31 years my legal practice has been in environmental law where I have litigated dozens of cases on behalf of and against public entities related to Environmental Impact Reports and Environmental

Impact Statements. I also have assisted in the preparation of many environmental impact assessments, including providing substantive comments and review on behalf of multiple public entities and a number of cities. Part of my expertise includes analyzing traffic impacts, runoff issues, noise impacts, air impacts and toxic/nutrient loading impacts from projects. I have spent literally thousands of hours over the last 30 plus years analyzing such impacts. To date, I have never lost of single case involving litigation over the sufficiency of an Environmental Impact Report or Statement. I have been considered by several courts to be an expert in environmental impact reports and litigation. In one of the last cases I handled involving the failure to prepare an appropriate EIR, the Court awarded over \$400,000 in attorneys' fees and costs to my client as the prevailing party. That amount could have been avoided had Los Angeles County simply listened to the comments that we provided. Accordingly, we urge you to similarly listen to our comments as the failure to do so may result in a large and expensive piece of litigation. The environmental impact report and statement litigations have involved a number of subjects including impacts to the local coastal zone and waters. Additionally, I have litigated dozens of cases involving toxic substances, including damages caused to water bodies from excess nutrients and toxic substances. I am on the editorial board of the Environmental Forensics Journal. I am routinely invited to lecture both nationally and internationally on issues involving the detection and impact of toxic substances and nutrients on the environment, including coastal waters. For example, I was asked to speak at the International Environmental Forensics Conference in China where I spoke on the admissibility of expert opinions in environmental forensic cases related to toxic pollutants. I also have been published in a number of books, publications and have been interviewed numerous times as an environmental expert by local and national media. I also have been a frequent user of Keauhou Bay for over 20 years such that a number of my comments are based on my personal observations over the course of several thousand hours over the last 20+ years. For the past two years I have spent over 200 hours observing usage of the bay, including public usage, the boat ramp and commercial/tourist usage of the bay particularly related to some of the initial scoping documents to see if there was any veracity in the claims presented by the Project proponent.

**B. Substantive Comments**

As discussed supra, the subject EIS is facially deficient and must be rejected in its entirety. Under existing law, the EIS conclusions and analysis must be supported by substantial evidence to support the analysis and conclusions. It is the burden of the party preparing the EIS to provide support for the document. The failure to provide the required supporting evidence for the statements and conclusions requires that the document be rejected by the reviewing public agencies. For the most part, the EIS appears to be a series of unsupported statements and conclusions and written to appear more as an advertising document for the project intended to "sell" the project to both the public and regulatory agencies rather than providing any substantive research and/or analysis. The comments listed below are not necessarily all inclusive but highlight the many deficiencies. It is our understanding that a number of other experts will also be submitting comments highlighting the deficiencies in the EIS and those comments are referenced, adopted and should be considered to be included herein.

**1. The Project Provides No Support Of How It Will Alleviate "Congestion" Conflicts Use**

First, the EIS creates a straw man argument that Keauhou Bay suffers from "congestion" and conflicts with incompatible uses. There is no supporting study analyzing the existing number of users on a daily, weekly, monthly and/or annual basis nor the type and timing of the usage. Without such an analysis, the statement that there is a problem with "congestion" and/or "incompatible uses" is simply unsupported

by any evidence. There are one or two photographs depicting people standing around the publicly owned dock area, which as people are congregating in publicly owned spaces the report fails to explain how the Project will prevent the public from congregating on publicly owned land. There is also Figure 3-13 which depicts a picture of the bay with ZERO people present, which directly contradicts any claim of congestion. Other than reducing access to publicly owned space, the project provides **no analysis** of how it will reduce the existing number of users nor the purported "incompatible" uses. Without underlying research, study and analysis the statements that the project would reduce "congestion" and/or use conflicts is unsupported and the EIS must be rejected on this basis alone. In fact, it would be reasonable to conclude that the project would substantially increase congestion and use conflicts at Keauhou Bay. For example, with the construction of 43 housing structures containing 150 housing units, which will each likely have 2 cars, with a minimum average of 4 car trips per vehicle per day, the housing units alone will likely add OVER 600 vehicles trips per day. (Based on my observations, the housing units alone will more than likely, on their own, double or triple the amount of traffic in the area.) Plus, you are adding hundreds of new visitors staying in the new housing on the bay, which presumably those new visitors will visit and use the bay. With the proposed cultural center, commercial center, commercial kiosks and employees/workers at the new proposed resort, there obviously will be a substantial increase in the number of additional vehicle trips per day. I'd note that the nearby Pu'uhonua o Hōnaunau National Historical Park ("City of Refuge") reports over 300,000 visitors per year to the site and cultural center (Volcanoes National Park attracts over a million visitors per year.) Will the new proposed cultural center (located substantially closer to the City of Kailua-Kona so it will be much easier for visitors to access) attract a comparable number of visitors per year to the City of Refuge? The EIS provides no projections based on increased numbers from the cultural center. Even assuming the new cultural center only attracts 100,000 visitors per year (which is less than 33% the number that visit the City of Refuge), that equates to nearly 30,000 additional vehicles trips alone per year. (Note: the City of Refuge Parking lot has 75 parking spots plus there are usually 20 plus cars parked outside the gate, meaning that with staff there are 100 plus parking spots associated with the City of Refuge that are frequently full. The Project proponent has ZERO parking spots in the EIS for the "cultural center" beyond the existing parking.) The kiosks at Alii Marketplace have approximately 40 parking spots that are largely full most of the time. Accordingly, one would anticipate the "kiosks" at the Project will require comparable parking (if not more because kayak and SUP rentals are likely going to stay longer than visitors to Alii Marketplace.) Accordingly, it may be reasonable to conclude that the Project will add a demand for upwards of 140 parking spots to the existing parking demands. There is no study of the existing parking requirements not assessment of the future parking requirements should the project be implemented. Plus, the EIS identifies the launch ramp area as the area of purported greatest congestion and yet the project proposes to ADD substantial numbers of visitors and vehicles to the area of alleged greatest congestion. The launch ramp cue (i.e. Vehicles/trailers waiting to launch and/or pull-out boats) is noted as an area of greatest congestion. The cultural center is proposed to be built in the area of greatest congestion. The Project fails to explain how adding thousands (if not tens of thousands) of more people and vehicles to the area identified as having the greatest congestion will be reduced by the Project. Particularly, the EIS fails to contain projections as to the increase in number of visitors and vehicles to the area and the extent to which the Project will impact those levels. (Note: With 43 houses and 150 units being built on the bay likely housing 250+ tourists each day plus commercial kiosks with kayak and SUP rentals, the bay daily usage will also likely substantially increase and yet there is no estimate of that impact.) There is NO analysis of the impact on local flora and fauna from the likely increase usage of the bay arising from the project. Moreover, with the addition of SUP and kayak rentals on the bay, the Project is likely to increase conflicts with the existing boating usage of the bay for ingress and egress to the loading ramp and dock area. There is no analysis of the future impacts on existing uses

of the bay with the addition of rental kayaks and SUP to the bay. For the foregoing reasons, the EIS must be rejected for failing to provide supporting evidence and documentation.

## 2. The Report Fails To Analyze Traffic Impacts

As discussed supra, the Project proposes to build a resort with 43 housing structures with 150 housing units (Note: the term "bungalow" seems to be an attempt to mislead the public in to believing that what is being proposed are not in fact large multi-bedroom homes), commercial kiosks, cultural center and commercial/retail center. It also proposes to build a new road connecting the north and south ends of the bay. As discussed supra, the Project will likely result in a minimum of hundreds, if not thousands, of additional vehicle trips per day. There is no study of the what the current number of vehicle trips per day are on the surrounding public roads, the level of impact of the existing stop lights nor the number of vehicles that travel from the south-north and/or north-south on the existing roadways that would conceivably use the new road. Accordingly, there is no evidence of what, if any, the amount of reduction on the existing roadways would be by the construction of a new road. Moreover, there is no analysis of the additional vehicle trips that would be created by the Project and what those impacts would be on existing traffic conditions nor existing parking. (Note: the impact of toxics on the bay from the Project will be discussed separately.) Moreover, the EIS fails to address how the Project proposes to mitigate the increased traffic impacts. Finally, the EIS asserts that the Project will reduce traffic impacts, without the citation to any evidence and/or study supporting that conclusion. The Project also proposes to relocate the existing commercial snorkel boat vendors to the other side of the launch ramp, which means the snorkelers will have to walk across the purportedly congested boat ramp to get to the dock area and load on the snorkel boats. (Note: With the current buildings next to the dock, the snorkel visitors don't have to walk across the busy double-lane boat launch ramp. (One can just imagine how many people will get run over by people either trying to launch and/or pull boats from the water during the day and at night.) On this basis alone, the EIS must be rejected and further studies conducted.

## 3. The EIS Fails To Address Noise Impacts From The Project

The Project purports to build a large resort, commercial center, cultural center and commercial kiosks. The majority of the project will tear out historically forested areas for which the only noise being generated is by natural flora and fauna and replace it with a resort and new road. There is NO study of the existing noise levels in the area. There is NO analysis of what increased noise impacts to the area will be from the Project other than conclusory statements that are without supporting evidence and/or study. Obviously, the Project will materially change existing conditions related to noise through a substantial increase in activity around the bay. (Potentially adding thousands of new visitors and vehicle noise to the bay area on a daily basis.) An noise study must be conducted to analyze existing noise levels and potential future noise levels.

## 4. The EIS Fails To Address Air Impacts From The Project

The Project proposes to build a large resort, commercial center, cultural center and commercial kiosks. In building the project roughly 20+ acres of existing native forest will be destroyed to build the resort. As discussed supra, potentially thousands of additional vehicle trips will be added to the area without any analysis as to what the existing air quality conditions are nor the impact of the additional vehicular and project features are to the local air quality. For example, even if the cultural center only has a fraction of the visitation as the 300,000 plus visitors that visit the City of Refuge, that could generate tens of thousands of additional vehicle trips to the bay area on a yearly basis and have potential

consequences to the local air quality. (Note: The area is generally not served by any public transportation, which necessitates vehicular travel.) A study needs to be conducted as to existing air quality and future projected air quality impacts from the project, including destruction of forest.

**5. The Report Fails To Address Historical Runoff Issues**

Currently, Kamehameha III Drive experiences flooding after even an average rainstorm. (Personal observations over the last 20 years.) Portions of the flooding appears to originate from Project lands and nothing in the EIS addresses how the Project will address existing flooding on Kamehameha III Drive caused by Project lands. The EIS also fails to address the fact that historically there were two sand volleyball courts. The 2<sup>nd</sup> court was situated in the publicly owned land between the seawall and the existing volleyball court. When the project proponent cleared lands (it appears illegally and without an EIS and/or other permit) to construct the existing parking lot and boat storage area the drainage was substantially effected and the rather than have vegetation slow the water flow, the surface flow rate dramatically increased and the 2<sup>nd</sup> sand volleyball court was washed out along with portions of the remaining volleyball court. (Personal observation.) Note: The EIS fails to address the permit status of the existing boat storage and parking lots on the northern side of Keaouhou Bay and I could not find any permit with the County for the construction nor corresponding environmental documentation. Accordingly, it appears that the boat parking lot and other parking lot may be unpermitted. The Project proponent failed to make repairs to the 2<sup>nd</sup> sand volleyball court located on public lands and existing sand volleyball court that its apparently illegal development destroyed. The EIS fails to address the apparent illegal development of the current northern parking lot and boat storage lot nor the environmental impacts therefrom. Notably, the EIS fails to also address that to the North of the sand volleyball court is a historical catchment area that helped capture runoff from the northern area where the new parking lots and boat storage were added. (Personal observation and interview of locals.) The Project proponent has failed to maintain the catchment, which has contributed to excess runoff from the area that has damaged publicly owned property. In interview of locals, in the past there have been attempts by the locals to keep the catchment clear so as to reduce flooding from the upper areas. The EIS must address the permit status (or lack thereof) of the apparently illegally constructed parking and boat parking lots including the lack of environmental review thereof, the historical runoff issues from the Project proponent lands that have caused damage to publicly owned property and how the project will mitigate existing issues. For this basis alone, the EIS must be rejected and further studies and assessments conducted.

**6. The Project Fails To Address Additional Runoff Impacts From Increased Hardscape**

The project proposes to take existing native vegetation areas and tear them out in favor of building the resort, commercial kiosks and commercial/retail. Based on the review of project maps, it appears that roughly 15-20 acres of native vegetation will be removed and replaced with mostly hardscape. There is NO analysis of the existing runoff from the "as is" condition of the properties and project area. There is also no study/analysis and/or projection of the increase flow and rate of runoff from the increased hardscape. The potential increased flow has the potential to alter the fresh/saltwater balance within the eastern end of the bay, which could impact fish and coral. This is a requirement of the EIS. The failure to include such an analysis mandates that the EIS be rejected and further studies of historical, existing and potential future conditions analyzed with appropriate mitigation measures.

**7. The Project Fails To Study, Analyze And/Or Provide Projection As To Increased Toxicity And Eutrophication Impacts To Keaouhou Bay**

As discussed supra, the Project proposes to add potentially thousands of new vehicle trips to the area surrounding Keaouhou Bay every day. Also, the Project proposes to add a new road closer to the Bay that would carry the additional traffic along with re-routing existing traffic that is currently roughly more than a ½ mile away and that currently drains to an existing golf course and forest area. Roadways are well known for the ability to accumulate and disperse toxic pollutants during rainfall events. Thus, by positioning the roadway closer to the bay there is the potential for an increase in toxic pollutants entering the bay and impacting existing flora and fauna. There is NO study and/or analysis of the existing toxicity of runoff to the bay from nearby roadways. Additionally, there is NO analysis or projection of the concentration and ecological impact of the project and additional roadway on future runoff to the bay arising from the Project. Not only do roadways accumulate toxicants that runoff the roadways during rainfall events, but projects such as resorts with houses, pools, lawns etc... also have increased runoff of nitrates and phosphates. Nitrates and phosphates, among similar chemicals, are well known to cause eutrophication to water bodies. Golf courses also have the potential to release substantial amounts of nitrates and phosphates through runoff. Currently, the golf course to the east of the bay drains into the forest area, which the Project proposes to remove. The forest area likely acts as buffer that absorbs nitrates and phosphates that are captured by the existing forest area. At times, after heavy rainfall, the end of the bay closest to Project proponent's property can appear slightly green and with surface scum, which suggests that under current conditions there may be nutrient issues with the current runoff. Not only does the EIS fail to analyze existing conditions but also the impact of the removal of the forest, construction of the road and construction of the resort on the future release of eutrophic chemicals to the bay. On this basis alone, the EIS must be rejected and further study conducted.

**8. The EIS Fails To Take In To Consideration The Historical Failure Of Proponent To Maintain Existing Facilities**

The EIS fails to analyze the long history of the failure of the Project proponent to provide maintenance to the existing properties. The EIS vaguely references the long-term maintenance issues related to Project proponent's properties and then suggests that the maintenance failure is due to the lack of income from the properties and that in the future the maintenance will improve. Such a suggestion by Project proponent is misleading at best and verges on being an outright fraudulent misrepresentation. Project proponent is a \$14.6 billion dollar entity according to its website. (See <https://investments.ksbe.edu/endorsement#:~:text=As%20of%20lume%203%20C%202023,Real%20Estimate%20of%20%244.7%20billion.>) Thus, the suggestion that the lack of maintenance was due to the lack of funding available in which to conduct maintenance. Moreover, Project proponent has historically received funding from the Keaouhou properties through the boat yard rental, parking, canoe club and building rentals such that the failure to conduct maintenance is inexcusable. For example, the existing seawall owned by Project proponent has been in serious disrepair for over a decade, with the wall having large pieces falling off into the ocean and no repairs have been made. Similarly, after Project proponent's construction of the apparently unpermitted northern parking lots occurred and the sand volleyball court built on public lands was washed away, Project proponent failed to attempt to any repair. Project proponent failed to maintain existing drainage structures to the north of the existing volleyball court. Moreover, the cultural heritage corridor (which they supposedly they care about) has been allowed to fail into disrepair, with broken benches for sitting, peeling paint, overgrown plants and trash that have largely gone unrepaired and neglected for the last decade or more. (Personal observation.) Thus, there is ZERO evidence to support that if the Project is approved that the Project proponent will suddenly and magically start to actually do maintenance on its' properties. As a result,

the EIS MUST consider that the Project proponent will act EXACTLY as it has in the past and continue to fail to maintain its' properties and what the implications will be on the future for the Project based on the last many decades of neglect by the Project proponent. Moreover, the EIS fails to disclose and discuss the long history of scandal and abuse associated with Project proponents organization and what transparency will exist to ensure that the Project will do what it is supposed to do. (See e.g. <https://www.kamoi.net/media/2020/03/12/an-investigative-report-into-the-past-trustees-of-kamehameha-schools/>) The EIS mentions nothing of other "projects" such as the cultural center and botanical gardens along Alii Drive that Project proponent has abandoned and failed to maintain in the past and currently. There is NOTHING in the EIS that provides any checks and balances to ensure that the Project will actually be maintained and based on history on the Project properties and nearby failed projects by the Project proponent, it is unlikely that the Project will meet its' promises. Moreover, the EIS, based on the poor maintenance history by the Project proponent on these and other nearby properties needs to consider the impacts of the Project proponent continuing to conduct basic maintenance on the Project properties as it has done for decades. In other words, the EIS needs to address not only the lack of historical maintenance, other failed nearby projects, and the impact of the failure to maintain the Project in the future. (Typically, a Project such as this will have a detailed maintenance and upkeep schedule of the Project and mitigation measures that then can be adopted as conditions of the Project approval and be enforceable by regulatory agencies.)

#### **9. The Project Blocks Public Access Across Publicly Owned Property**

Based on the maps attached to the EIS, there is publicly owned property extending from the end of Kamehameha III Drive to the boat dock area. Currently, there is a path that extends from the end of Kamehameha III Drive to the boat dock area that allows access to the boat dock area. (personal observation and use.) However, the project proposal maps appear to block to existing publicly owned path from the end of Kamehameha III Drive to the dock area. Project proponent misleading fails to identify the existing path and access across publicly owned property. Nevertheless, the Project proponent proposes to block access to the public across publicly owned property, which is illegal. As a result, the EIS must be rejected and the current public access preserved in future versions should be Project wish to move forward.

#### **10. Destruction Of The Sand Volleyball Courts Violates Proponents Charter As Well As Access To Publicly Owned Property**

Historically, there were two sand volleyball courts located on the east end of Keauhou Bay. One of the sand volleyball courts was located at the western edge of Project proponents' property, which is the existing volleyball court. According to locals, the existing volleyball court has been in continuous use by the public, including locals and in particular local kids for at least 35+ years. Dozens of comments have been submitted stressing the importance of the sand volleyball courts to the local community. With the limited number of sand volleyball courts available locally, this is the primary sand volleyball court used by local kids who want to learn how to play sand volleyball. As women's sand volleyball is now a collegiate sport and men's sand volleyball is also poised to become a men's collegiate sport, the existing volleyball court is a critical resource for local kids hoping to not only learn how to play volleyball, but also pursue potential college scholarship opportunities. Notably, sand volleyball is one of the sports that most represented by local Hawaiians in the Olympics. Up until Project proponent cleared land to create the northern parking lot and boat parking, there was second sand volleyball court that was similarly used by locals. Project proponent proposes to eliminate BOTH volleyball courts and instead grass in the area as "open space." There is no analysis as to the impact of eliminating the existing volleyball court nor the

impact on the local community and uses. Currently, there is roughly 10-20+ adults and kids that utilize the existing volleyball court on a daily basis. Accordingly, Project proponent should be required to analyze the impact of eliminating the existing volleyball court. There is nothing in the Project that would replace the 2<sup>nd</sup> court that was damaged by the excess runoff caused by land prior land clearing activities. At a minimum, the Project should be required to replace the 2<sup>nd</sup> volleyball court that was damaged by Project proponent's activities and to ensure that future runoff is controlled so it does not impact the sand volleyball court. Notably, historical photographs (See attached historical photograph from 1990) show that the East end of Keauhou Bay was a sandy beach ALL of the way up to the base of the hill to the East of the existing volleyball court. The seawall appears to be a late addition built within the existing high tide area. (See historical nautical chart dated 1949, which does not note the presence of any seawall.) Based on the 1949 chart, the seawall itself appears to have been constructed below the mean high tide line, which appears to be publicly owned land. Thus, a large grassy area constructed on Project proponents' property and on the publicly owned lands is incompatible with both historical and current uses. There is no analysis of the impact of the removal on historic cultural uses and current uses. To be consistent with historical uses on both the public lands and lands within the historical mean high tide, Project proponent should be required to replace the sand that has been lost and to ensure that it cannot be washed away by excess runoff. Due to the failure to analyze the impacts of the sand volleyball court removal, proposed construction on publicly owned lands and within the mean high tide and the failure to consider future impacts, the EIS should be rejected. (Not to mention the failure to address seawall that is falling down.) Moreover, if Project proponent should consider moving forward in the future, the sand volleyball courts should both be replaced, the drainage fixed and maintained by Project proponent. All of the above should be supported by adequate usage and projection studies.

#### **11. The EIS Fails To Address Congestion Caused Elsewhere By The Removal Of The Sand Volleyball Courts**

It is my understanding that literally dozens of comments have been received outlining the usage of the volleyball court and negative impact from its removal. The remaining court is utilized on a daily basis by the public and local kids. It is a long-standing tradition that family's barbecue locally and play on the volleyball courts every weekend. With the removal of the remaining court, the usage will be transferred to already congested sand courts at Magic Sands Beach and Coconut Grove creating both congestion and usage conflicts elsewhere. The EIS fails to analyze existing usage nor where the existing usage would be relocated. It fails to address potential congestion caused at the other locations by the court removal. A study needs to be conducted of existing usage and the impact of shifting that usage to the 2 remaining sand volleyball courts in the area.

#### **12. Existing And Future Impacts On The Coral In The Bay Are Ignored**

The USEPA considers sedimentation, pollutants and nutrients to be some of the primary threats to coral communities. (<https://www.epa.gov/coral-reefs/threats-coral-reefs#:~:text=Metals%20such%20as%20mercury%20and,%2C%20feeding%2C%20and%20defense%20responses.>) A healthy coral community is key to maintain a healthy aquatic environment. The status of the health of the coral reefs within Keauhou Bay and the impact of existing sedimentation, toxics and nutrients has not been assessed. Current impacts from Project proponent's properties to the health of the coral reefs has not been studied nor assessed. The EIS fails to quantify the potential amount of sediment, pollutants and nutrients that may be generated from its construction activities nor from the Project. The EIS analyzes no potential mitigation measures that may be adopted to address past and current impacts to the bay from Project proponent's properties nor future impacts to the bay

from the Project. As a result, the EIS is facially deficient and rejected so that the appropriate studies of the baseline conditions of the bay are studied and future project impacts are assessed and appropriate mitigation measures adopted to ensure the health of Keauhou Bay.

### 13. The EIS Fails To Consider Tsunami Impacts On The Cultural Center

Presumably, the proposed "Cultural Center" would contain hawaiian artifacts etc.... However, the buildings that Project proponent proposes to utilize as a "Cultural Center" were badly damaged during the last tsunami (which was a relatively small tsunami.) If the Culture Center had been in operation during the last tsunami, precious artifacts would have been lost and/or destroyed. Instead, as the buildings housed snorkel tour businesses, all that was damaged was the buildings and their easy to replace contents. It is inconceivable that any entity that purports to be charged with a duty to protect cultural heritage would place a Culture Center at one of the highest at risk locations on the islands. (Due to Keauhou Bay's triangular shape and rapidly rising depths, a tsunami wave from a westerly direction is channeled, funneled and magnified by the shape of the bay.) This makes Keauhou Bay one of the locations on the western side of the island most likely to experience the largest tsunami impacts. The report fails to mention that entire buildings adjacent to the proposed Culture Center were destroyed by the last tsunami nor are any mitigation measures proposed. Without any information in the EIS it is unclear what if any protection would exist for the Cultural Center and any artifacts inside.



#### Threats to Coral Reefs | US EPA

Coral reefs are among the most biologically diverse and valuable ecosystems on Earth. This web site describes the importance of coral reefs, threats to them, and ongoing efforts to protect them.

[www.epa.gov](http://www.epa.gov)

### 14. The EIS Report Fails To Address Adequate Project Alternatives

The EIS and the Project proponent infer that there is a "need" for greater economic development and use of the property. However, the EIS fails to disclose the current income levels from the current uses of the properties. Moreover, the EIS fails to address any "smaller" project alternatives. As everyone is aware, Project proponent has spent over a decade in construction of the Kahalu'u Ma Kai Project located on 22 acres nearby. (The hotel closed in 2012.) As that project historically operated a resort and was fully developed, logic would dictate that if Project proponent was concerned about income that property would an ideal location for a resort. Currently, there is apparently no economic use being made of the Kahalu'u Ma Kai property and very little use for educational purposes. According to the locals, the primary use appears to be for private barbeques and events for select locals connected to Project proponent. (Notably, there seems to be very little to anything "cultural" about 22 acres of non-native mowed bermuda grass, which is a post-european contact non-native species.) Accordingly, if the income from the Keauhou properties is such a great concern, where they are currently making money, and Kahalu'u Ma Kai is making zero income, shouldn't the project be built on Kahalu'u Ma Kai and a more limited project build at Keauhou? The EIS does NOT explore that alternative. Moreover, across the street from Kahalu'u Ma Kai is, from my

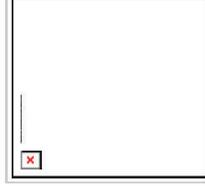
understanding, a former "cultural center" and botanical garden that was closed by Project proponent and appears to generate zero income. The EIS fails to analyze a situation where the resort would be constructed on that property and a smaller project constructed on the Keauhou properties. Again, the EIS should consider reasonable alternatives where Project proponents use underutilized properties near the Keauhou properties, and a smaller project be built on the Keauhou properties.

### Conclusion

It would be hard to find a more defective and deficient EIS. In the last 30+ years I've yet to see a more facially defective and deficient EIS. The EIS reads like an advertising brochure with a bunch of unsupported claims and conclusory statements. The EIS appears to be written with the goal of misleading the public and regulatory agencies rather than informing them of potential impacts and setting out appropriate mitigation measures. There were virtually no studies conducted of the existing environmental conditions at, near and/or inside Keauhou Bay. Most of the summary conclusory statements have zero evidentiary support. In fact, most statements related to project impacts appear by use of simply common sense to be likely untrue, misleading and false. The Project proponent has the burden to conduct adequate studies of existing conditions and provide an assessment of future conditions, which is has failed to even remotely attempt to do so. The EIS should also assess mitigation measures to reduce the project impacts, which can then be adopted as conditions to the Project approval. Thus, if the mitigation measures and maintenance requirements be adopted as conditions of approval, they become enforceable by the County. The County of Hawaii legally cannot "weigh" expert opinion in deciding whether to approve an EIS. As there are no studies to support the conclusions in the report and multiple expert opinions pointing out the deficiencies in the lack of appropriate studies, projections and mitigation measures the County cannot legally approve of the EIS as drafted.

Very truly yours,

Jeffery L. Caufield



#### An Investigative Report into The Past Trustees of Kamehameha Schools

In the period of 1992-2001, the trustees of Kamehameha Schools committed acts of abuse of power that would entail months of investigations and news reports. The

[www.kamoi.net](http://www.kamoi.net)

**From:** Jeff Caufield <[REDACTED]>  
**Sent:** Friday, July 12, 2024 3:18 PM  
**To:** Rebecca Melendez <[REDACTED]>  
**Subject:** Re: Keahou Bay

Yes. No problem promoting your website. You did a great job.

Mahalo!

**From:** Rebecca Melendez <[REDACTED]>  
**Sent:** Friday, July 12, 2024 3:05 PM  
**To:** Jeff Caufield <[REDACTED]>  
**Subject:** Re: Keahou Bay

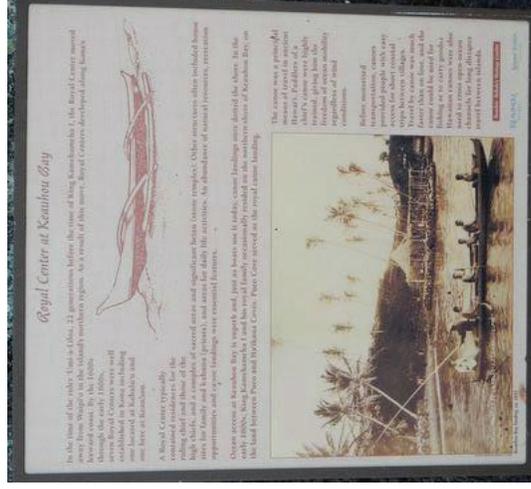
Thank you,.

Will you promote my website as a place people can go to learn what to do?

On Fri, Jul 12, 2024, 11:53 AM Jeff Caufield <[REDACTED]> wrote:

I am available to call in to radio shows, give newspaper interviews etc... But am not currently on island. I'll be in Europe from July 25-August 12<sup>th</sup> so after July 25<sup>th</sup> my availability will be limited. A brief synopsis of my background:

I graduated from UC Santa Barbara with a degree in environmental studies and from law school from the University of the Pacific, McGeorge School of Law. Prior to becoming an environmental attorney I worked for several years as an environmental consultant. For the past 31 years my legal practice has been in environmental law where I have litigated dozens of cases on behalf of and against public entities related to Environmental Impact Reports and Environmental Impact Statements. To date, I have never lost a single case involving litigation over the sufficiency of an Environmental Impact Report or Statement. I have been considered by several courts to be an expert in environmental impact reports and litigation. The environmental impact report and statement litigation have involved a number of subjects including impacts to the local coastal zone and waters. Additionally, I have litigated dozens of cases involving toxic substances, including damages caused to water bodies from excess nutrients and toxic substances. I am on the editorial board of the Environmental Forensics Journal. I am routinely invited to lecture both nationally and internationally on issues involving the detection and impact of toxic substances and nutrients on the environment, including coastal waters.



## Aaron Chang

Aloha, and thank you for this opportunity to comment on the Kamehameha Schools' Keaouhou Bay Management Plan Draft EIS of June 23, 2024.

I appreciate Kamehameha Schools (KS) for maintaining its awareness of what makes Keaouhou Bay and the surrounding lands and coastal resources so special in all the world, and commend KS for its willingness to envision a development of lower-density than it could build (e.g., a 700-room hotel or resort). But the current plan is still too much, and will alter the environment, the community, and the character of this place with such significance that we are assured of losing it to becoming another over-used tourist destination, populated mostly by people from outside Hawai'i, with locals once again priced out of the area.

What KS calls "low-impact" is only low-impact" compared to what it could do in this resort zoned area, but when you look at the proposal the impact will actually be quite high, and much more significant than the public is being told.

For this small area, to build 150 bedrooms in bungalow-style lodgings, along with commercial buildings, vendor kiosks, restaurants, ocean sports rentals, etc., will result in substantial increases in congestion of both vehicles and people, all trying to utilize this small geographic area.

Currently Keaouhou Bay is a relatively quiet, relaxing place, a remnant of what Hawai'i Island used to be, a reminder of what Hawai'i Island has lost so much of, an experience which is so rare, unique, and special in all the world, that people come from all over the planet to visit it.

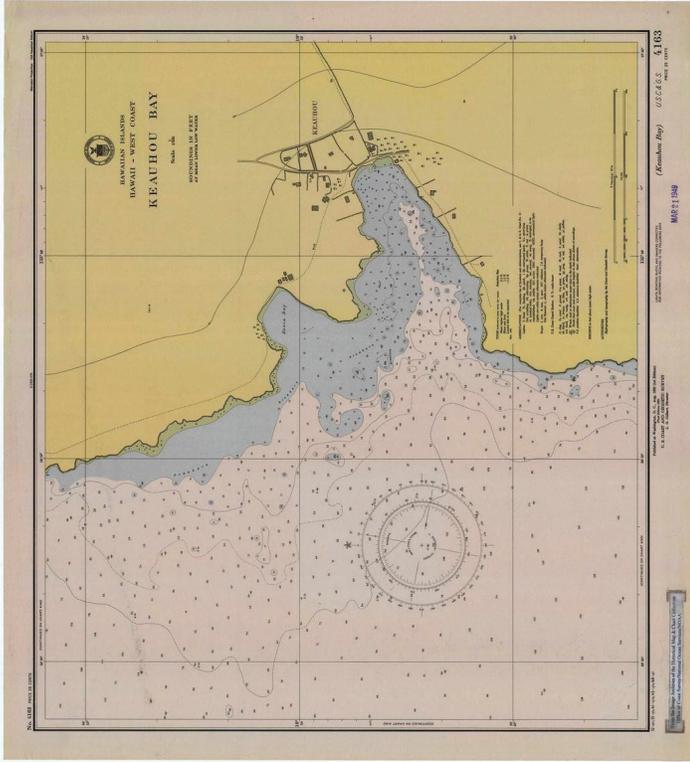
There are deficiencies in the Draft EIS which prevent the community and government from truly and reasonably understanding the impacts they are being asked to approve.

Why are there no substantial studies of current traffic compared to what the additional traffic will be under the proposal? With increases in congestion around the bay, polluted runoff is unavoidable, which will harm marine life.

The community deserves a better study on how vehicle and foot traffic will be moving through this area together, and how many more people and vehicles are likely to impact the area over many years.

Destroying the many acres of forest above the bay and replacing that with urban development, buildings, homes, streets, and parking lots may not be an impact like a nuclear waste dump, but it is a significant alteration of the environment, introducing numerous sources of non-point source pollution affecting not just the bay but the larger coastal environment. This includes toxic pollutants from roads, homes, yards, and businesses.

The forest which soaks up much of the heavy rains will be gone, the landscape will be hardened with 248 new parking spaces for the resort and new restaurant, as well as commercial and retail activities adjacent to the resort. This assures significant increases in polluted runoff, and much the wildlife that currently lives there and has nowhere else to move thanks to the significant loss of



large tracts of undisturbed natural habitat will likely die, or be forced to outcompete other wildlife in the areas where migration occurs.

Tourists will inevitably want to swim in the bay, which will create dangerous conflicts with boats that use the small bay year-round.

Any new development should include a maintenance plan to protect the bay environment and maintain nice facilities for the community.

To preserve the character and cultural significance of Keauhou Bay and overall region, the community would deeply appreciate KS withdrawing this plan, and returning with one that is more limited in scope, and truly takes into account the needs of our residents.

Today, we live on an increasingly crowded island, and what is done in one area significantly burdens all surrounding areas. The public has cherished this place for many years. Please don't destroy what is so unique and special about this place. Please don't take that from our community.

If anything, what we need more of in the Keauhou area is workforce housing that is truly affordable. Using the land for any resort or commercial purpose prevents any such housing from being possible there.

Mahalo nui loa for your thoughtful and serious consideration of these concerns.

Aaron Chang

## Donna. Cherrier

Keauhou Bay is at capacity you at the present! The water often is brown after a rain and doesn't allow use by local citizens

July 5, 2024

To whom it may concern,

Please, read the scientific proof below and state in your report that this Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT in Keaouhou Bay as stated in all the different reported articles below.

Keaouhou Bay is a DOCUMENTED RESTING AREA for the ENDANGERED MONK SEAL, and if a resort is allowed to be built, that will bring a lot more people down to Keaouhou Bay and if a monk seal is resting they most likely will disturb the monk seal with their selfies because it is fully known this is now a SELFIE CULTURE.

This information is by NOAA Scientist, "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media.

There's a seal on the beach! Let's go get a 'selfie!'" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/engangered-hawaiian-monk-seals-cri-foul-over-selfies>

Has there been a detailed traffic study for the increase in cars that will be added to this already severely traffic area?

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the **destruction of sensitive marine habitats** such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of **sediments** into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracts <https://oceantracts.org/libray/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

If you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years and, "Noise Pollution

Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behaviour of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keaouhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project, because it is scientifically proven that developments will ALWAYS have rain runoff that will pollute nearby waters constantly during development and after.

Please, read the Scientific articles below written by NOAA, National Oceanic and Atmospheric Administration and other professional organizations, that prove that developments have ALWAYS polluted the water in every coastal developed area.

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all Aquatic Life there, and even the Manta Rays that go there to eat zooplankton from the Manta Ray tours at night, and they eat it during the day in that area as well because they need to eat 5 times their body weight in zooplankton daily. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

If you allow this bay to be developed you will be allowing all types of marine life to die and there is NO WAY to stop this from happening because polluted runoff rain water from developments can't be fully stopped. It is what has happened in ALL coastal developments.

Please read the Scientific proof below.

Reason #1 It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide..."

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-

off). " <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20Bleaching%20is%20Occurring%20more,had%20catalytic%20impacts%20state%20wide.>

This article is by the Coral Reef Alliance here in Hawaii: "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawaii%20reefs%20face%20major%20global,into%20Hawaii%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The Chesapeake Bay has a foundation that is trying to save it due to runoff pollution that was caused by developments, and the Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed because this bay is very small.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow...

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy>.

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay because it is so much smaller than the Chesapeake Bay.

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species>.

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide>.

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_coral/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organism%20that%20can%20smother%20corals](https://oceanservice.noaa.gov/education/tutorial_coral/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organism%20that%20can%20smother%20corals).

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_coral/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days](https://oceanservice.noaa.gov/education/tutorial_coral/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days).

Reason #2 It's Been Proven Resort Developments KILL Marine Life

The manta rays go to Keauhou Bay every night to eat zooplankton and if you allow this development that WILL have runoff water, you WILL be causing zooplankton to be seriously affected because as this article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that proves runoff from development in this area will hurt and kill plankton, by **Frontiers in Marine Science**, "**Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon**" The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the

natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl- $\alpha$  concentration and phytoplankton abundance over the entire experiment."

<https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

"Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

Here is a research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation." [https://scopes.dge.carnegiescience.edu/SCOPE\\_12/S\\_COPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scopes.dge.carnegiescience.edu/SCOPE_12/S_COPE_12_3.6_chapter12_257-274.pdf)

The above articles show that development of Keauhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this could cause the manta ray food source to disappear and that will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on the manta ray tour for their income.

Reason #3 It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will forsure bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regards to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20silting.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20study,%20said.>

If you allow this resort to be developed, you will be destroying the coral reefs in the bay because this bay is extremely small and used by a lot of locals already for fishing, canoeing, swimming, snorkeling, paddle boarding, surfing, boating...it can't afford more use by many thousands more people yearly.

if you allow Keauhou Bay to be development there will be a higher population in the bay and that will hurt the coral in the bay as well, because it's known that, "Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with metapopulation theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science

Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300>

[328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20situation.](#)

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaJhJAnWAq453tRgNOAJWl9inR3ZoTvOPyGzA5ic\\_H00JzcHNIP3ASnhcgKRv6\\_vKLPw49dbmBYoXSg3YIMgQIGBZsabdGUiH7OISLbu9x5Pr3xED4kxI4TosJlvqQIa7ZzRT3r,UbraxpodJd2AoNISmWSuxB7jJEDdpJ8OGJpx7ITJWdCFxvFKJIZYeNdcjJ3sw\\_dnaUg5IZlhcjPBDImmahI5yqT5O%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaJhJAnWAq453tRgNOAJWl9inR3ZoTvOPyGzA5ic_H00JzcHNIP3ASnhcgKRv6_vKLPw49dbmBYoXSg3YIMgQIGBZsabdGUiH7OISLbu9x5Pr3xED4kxI4TosJlvqQIa7ZzRT3r,UbraxpodJd2AoNISmWSuxB7jJEDdpJ8OGJpx7ITJWdCFxvFKJIZYeNdcjJ3sw_dnaUg5IZlhcjPBDImmahI5yqT5O%3D&tracking_referrer=abcnews.go.com)

Reason #4 a Resort Development WILL Increase Traffic on Already Severly Trafficed Roads

The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side.

Allowing another resort to be developed will bring more cars that will lead to a lot more traffic that the island can not handle, please read the articles below by different NEWS companies that prove this point.

This NEWS article by Hawaii News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Please watch their video on their link below because it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists comes more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most

traffic fatalities in state. This time last year Hawaii island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks...

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is the same for Big Island. The traffic problems they talk about are the same issues here on Big Island, and this article also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

Please, watch the NEWS video from the link below on aerial footage in Hilo because the footage shown is the same thing that is happening on Alii Drive and Queen K HWY, and for the same reasons.

There are 2 developments already on Alii Dr. being built as of today, and more are scheduled for this road in the near future, and Alii Dr. and Queen K HWY are the roads Kamehameha Schools Bungalow Resort will be using if approved and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow already.

The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well.

See the photo below that proves this point in Kona, and here is the NEWS article by KITV NEWS that talks about Hilo and the same thing is happening

in Kona on the roads Kamehameha Schools wants to develop their resort, "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash on Alii Dr. and when there is an accident on this road, it turns into only one lane that needs a flagger to help direct traffic. and that adds even more traffic to this already seriously congested road, and Kamehameha Schools wants to add a resort on this road, and that will increase the traffic even more.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=EQSsnPDjI8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Please read this Path article, HAWAII! COUNTY'S VISION ZERO INITIATIVE

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii! Island.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path as well as The Law of the Splintered Paddle below <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

### **The Law of the Splintered Paddle**

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law, "K?n?wai M?malahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law

proclaimed that the defenseless (especially k?puna and keiki) across Hawaii! be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawaii!. After being added back in 1978, the law is part of Hawaii's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

**The Law of the Splintered Paddle** is also on Kamehameha Schools website, so they should want to help make Big Island roads become safer and not add to the traffic and possible traffic death toll problem. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

Besides a resort development in Keauhou Bay causing runoffs that will severely pollute the bay as the above research and science articles have shown above causing marine life to die, it will also increase in the bay's population that will seriously add to damaging even more coral, plankton and all marine life as well, and the island has severe traffic issues already with increased death tolls rising, and a resort development in Keauhou Bay will totally increase even more traffic in these already severely congested traffic areas.

Reason #5 The Big Island Doesn't Have the Resources and Infrastructure for Another Resort

Please see the articles below because the Big Island doesn't have the resources or infrastructure to safely add another resort development on island and these other NEWS and Research articles prove this point.

- 1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent

regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community

support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) "The overwhelming plastic waste Hawaii visitors leave behind By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A county commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill By Megan Moseley September 6, 2023 · 1:00 AM HST \* Updated September 6, 2023 · 2:02 PM

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawai'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawai'i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealahehe sewage plant discharges more than 1 million gallons

of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii' Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii' Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "BIG ISLAND NEWS HECO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii' State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST

\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) "LOCAL NEWS

HECO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawai'is water supply Hawaii' Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawai' Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawai'is power system from its water system, said Kawika Uyehara, deputy director of Hawai' County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) U.S. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues  
By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is ola i ka wai, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and it isn't addressed soon, one community member says, "we're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) NewsHawaii'i County issues mandatory 25% water restriction for North Kona  
August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawaii'i Water Supply Closely Monitored As Severe Drought Continues  
by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawaii, the Hawaii'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-CA-BB-i-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

20) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/Bigisland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reportng\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/Bigisland/comments/1bnuar3/hawaiian_electric_is_reportng_that_several_large/?rdt=52660)

21) "NewsHawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will damage Keauhou Bay coral and marine life and, Big Island resources and infrastructure are currently being negatively affected from the development that is on island already, and there are years of new development that have already been approved, before having safe resources and infrastructures for new developments.

With these scientifically proven articles by some of the most professional scientists in the world, they say the a serious population increase, as well as development and resort runoff that happens because of parking lots, and... with all coastal developments, it will be dangerous for Keauhou Bay to be development because it will damage the marine ecosystems in the area.

Please, save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools because all of these articles prove it would be extremely damaging to the waters at Keauhou Bay.

Thank you,

Sincerely,

**Donna Cherrier**

**Keauhou Punahele Resident**

Donna Cherrier

July 5, 2024

Hello Please see attached my comment letter for the Keauhou Bay EIS process. Thank you

To whom it may concern,

Please, read the scientific proof below and state in your report that this Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT in Keauhou Bay as stated in all the different reported articles below.

Keauhou Bay is a DOCUMENTED RESTING AREA for the ENDANGERED MONK SEAL, and if a resort is allowed to be built, that will bring a lot more people down to Keauhou Bay and if a monk seal is resting they most likely will disturb the monk seal with their selfies because it is fully known this is now a SELFIE CULTURE.

This information is by NOAA Scientist, "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media.

There's a seal on the beach! Let's go get a 'selfie!'" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

Has there been a detailed traffic study for the increase in cars that will be added to this already severely traffic area?

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the **destruction of sensitive marine habitats** such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of **sediments** into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/libray/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

If you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years and, "Noise Pollution

Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behaviour of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keaouhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project, because it is scientifically proven that developments will ALWAYS have rain runoff that will pollute nearby waters constantly during development and after.

Please, read the Scientific articles below written by NOAA, National Oceanic and Atmospheric Administration and other professional organizations, that prove that developments have ALWAYS polluted the water in every coastal development area.

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keaouhou Bay will be devastating to the coral, reef fish, and all Aquatic Life there, and even the Manta Rays that go there to eat zooplankton from the Manta Ray tours at night, and they eat it during the day in that area as well because they need to eat 5 times their body weight in zooplankton daily. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

If you allow this bay to be developed you will be allowing all types of marine life to die and there is NO WAY to stop this from happening because polluted runoff rain water from developments can't be fully stopped. It is what has happened in ALL coastal developments.

Please read the Scientific proof below.

Reason #1 It's Been Proven Developments Severely Pollute Nearby Waters Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide..."

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-



Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris."

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_coral/09\\_humantreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_coral/09_humantreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_coral/coral09\\_humantreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_coral/coral09_humantreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

Reason #2 It's Been Proven Resort Developments KILL Marine Life

The manta rays go to Keauhou Bay every night to eat zooplankton and if you allow this development that WILL have runoff water, you WILL be causing zooplankton to be seriously affected because as this article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that proves runoff from development in this area will hurt and kill plankton, by **Frontiers in Marine Science**, "**Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon**" The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the

natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-*a* concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

"Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

Here is a research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation." [https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

The above articles show that development of Keauhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this could cause the manta ray food source to disappear and that will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on the manta ray tour for their income.

### Reason #3 It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will force a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regards to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20study%20said.>

If you allow this resort to be developed, you will be destroying the coral reefs in the bay because this bay is extremely small and used by a lot of locals already for fishing, canoeing, swimming, snorkeling, paddle boarding, surfing, boating...it can't afford more use by many thousands more people yearly.

If you allow Keauhou Bay to be developed there will be a higher population in the bay and that will hurt the coral in the bay as well, because it's known that, "Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with metapopulation theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300>

### 328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii. Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wskgQNhaJhJAnWwAq453tRgNOjAWeI9inR3ZoTvOPyGzA5ic\\_H00JzcHNIP3ASnhcgKRy6\\_VKLPw49qbmBYoXSg3YIMgQjGBzsbpdGUH701SLbu9x5Pr3xED4KxI4T0sJlvqQ1a7ZRT3rUbraxpodJd2AonISmWSuxB7JjEDpJj8OGJpx7TjTWdCfXvFKJZjYeNdcj3Sw\\_dnaUg5IzhcJpBDImmaH15yqT5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wskgQNhaJhJAnWwAq453tRgNOjAWeI9inR3ZoTvOPyGzA5ic_H00JzcHNIP3ASnhcgKRy6_VKLPw49qbmBYoXSg3YIMgQjGBzsbpdGUH701SLbu9x5Pr3xED4KxI4T0sJlvqQ1a7ZRT3rUbraxpodJd2AonISmWSuxB7JjEDpJj8OGJpx7TjTWdCfXvFKJZjYeNdcj3Sw_dnaUg5IzhcJpBDImmaH15yqT5Q%3D&tracking_referrer=abcnews.go.com)

### Reason #4 a Resort Development WILL Increase Traffic on Already Severely Trafficed Roads

The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side.

Allowing another resort to be developed will bring more cars that will lead to a lot more traffic that the island can not handle, please read the articles below by different NEWS companies that prove this point.

This NEWS article by Hawaii'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%. " Please watch their video on their link below because it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists comes more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most

traffic fatalities in state. This time last year Hawaii island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks...

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is the same for Big Island. The traffic problems they talk about are the same issues here on Big Island, and this article also gives one Big Island example. "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

Please, watch the NEWS video from the link below on aerial footage in Hilo because the footage shown is the same thing that is happening on Alii Drive and Queen K HWY, and for the same reasons.

There are 2 developments already on Alii Dr. being built as of today, and more are scheduled for this road in the near future, and Alii Dr. and Queen K HWY are the roads Kamehameha Schools Bungalow Resort will be using if approved and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow already.

The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well.

See the photo below that proves this point in Kona, and here is the NEWS article by KITV NEWS that talks about Hilo and the same thing is happening

in Kona on the roads Kamehameha Schools wants to develop their resort, "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash on Alii Dr. and when there is an accident on this road, it turns into only one lane that needs a flagger to help direction traffic. and that adds even more traffic to this already seriously congestion road, and Kamehameha Schools wants to add a resort on this road, and that will increase the traffic even more.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FQssnPDjI8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Please read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path as well as The Law of the Splintered Paddle below <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

### **The Law of the Splintered Paddle**

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law, "Kōnōwai Mōmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law

proclaimed that the defenseless (especially k?puna and keiki) across Hawaii'i be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawaii'i. After being added back in 1978, the law is part of Hawaii's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

**The Law of the Splintered Paddle** is also on Kamehameha Schools website, so they should want to help make Big Island roads become safer and not add to the traffic and possible traffic death toll problem. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

Besides a resort development in Keauhou Bay causing runoffs that will severely pollute the bay as the above research and science articles have shown above causing marine life to die, it will also increase in the bay's population that will seriously add to damaging even more coral, plankton and all marine life as well, and the island has severe traffic issues already with increased death tolls rising, and a resort development in Keauhou Bay will totally increase even more traffic in these already severely congested traffic areas.

Reason #5 The Big Island Doesn't Have the Resources and Infrastructure for Another Resort

Please see the articles below because the Big Island doesn't have the resources or infrastructure to safely add another resort development on island and these other NEWS and Research articles prove this point.

- 1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawaii'i Sanitary Landfill reaching capacity.

The West Hawaii'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawaii'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent

regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) "The overwhelming plastic waste Hawaii visitors leave behind  
By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A county commission drafts ordinance aiming to ban recyclables at West Hawaii landfills By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawaii County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawaii Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealahehe sewage plant discharges more than 1 million gallons

of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "BIG ISLAND NEWS HECO restores power after initiating emergency outages on Big Island by: Elizabeth Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) "LOCAL NEWS

HECO issues rolling power outages around Big Island by: Emily Cervantes  
Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM  
HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night."  
<https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawai'i's water supply Hawai'i Public Radio | By Savannah Harriman-Pote  
Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawai'i Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawai'i's power system from its water system, said Kawika Uyehara, deputy director of Hawai'i County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) U.S. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues  
By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "we're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) NewsHawai'i County issues mandatory 25% water restriction for North Kona  
August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawai'i Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca-bbi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to their homes to help with power issues on the island.

20) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reportng\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reportng_that_several_large/?rdt=52660)

21) "NewsHawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

## Linda Churches

I am voicing my concerns with the proposed development of Keauhou Bay. During my 13 years of standup paddleboarding and paddling, Keauhou Bay has been the primary location for my water activities. During this time, I have witnessed periods of water degradation and numerous algae blooms. I am concerned with the water quality in Keauhou Bay and feel the water will only be further degraded with the addition of a resort.

Another concern I have is congestion in Keauhou Bay. There are times when launching and landing personal watercraft is difficult due to the volume of others using the Bay. Maneuvering through swimmers, families enjoying the water, and other personal watercraft can be difficult at times. I feel the addition of a resort will only exacerbate the congestion in Keauhou Bay and escalate safety issues.

Keauhou Bay is a special place that should be preserved and protected. I do not feel that the addition of a resort would accomplish this.

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-serve-power-due-to-down-generators/>

All the articles above show that a resort development will damage Keauhou Bay coral and marine life and, Big Island resources and infrastructure are currently being negatively affected from the development that is on island already, and there are years of new development that have already been approved, before having safe resources and infrastructures for new developments.

With these scientifically proven articles by some of the most professional scientists in the world, they say the a serious population increase, as well as development and resort runoff that happens because of parking lots, and... with all coastal developments, it will be dangerous for Keauhou Bay to be development because it will damage the marine ecosystems in the area.

Please, save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools because all of these articles prove it would be extremely damaging to the waters at Keauhou Bay.

Thank you,

Sincerely,

**Donna Cherrier**

**Keauhou Punahele Resident**

## Theresa Coe

We applaud your efforts to raise and maintain funds for your Kamehameha Schools foundation, but more development at Keaouhou Bay is not the answer. You must realise that the financial benefit would merely be short-term and that the long-term consequences would be dire - inter alia irreversible environmental damage, loss of native flora and fauna on land and sea, the local people's peaceful enjoyment of swimming, sailing, canoeing, volleyball will be lost.

There are much better ways to manage your finances, please do not fall into the trap of the big real estate developers who are often motivated by self-interest.

Above all be a good neighbour to all who live in Keaouhou/ Kahaluu who love it for what it is now. In hope, Theresa Coe

## Cari Coleman

As a proud graduate of Kamehameha Schools, I am writing to express my strong support for the Keaouhou Bay Management Plan Draft Environmental Impact Statement (EIS). The proposed improvements reflect a deep understanding and respect for our cultural heritage and the environment. Keaouhou Bay holds significant cultural and historical importance, not only to our local community but also to the broader Native Hawaiian community. The initiatives outlined in the management plan, such as improved facilities, enhanced conservation efforts, and increased educational opportunities, are vital for preserving the bay's natural beauty and cultural significance for future generations. The EIS provides a thorough assessment of potential environmental impacts and demonstrates a commitment to sustainable development. The heritage corridor will bring much needed care to the wahi pana sites found at Keaouhou Bay, while also providing an opportunity to educate those who come to the bay. The 10+year long-range timing of developing the 150+ low impact lodging units mauka of the bay area gives planners and Kamehameha Schools time to fully realize the model such sustainable lodging could be for Hawaii. It's time to embrace sustainable lodging practices for our visitor industry. I commend the planners for their thoughtful approach and encourage the swift adoption and implementation of this plan. It is through such efforts that we honor our past, protect our present, and ensure a thriving future for Keaouhou Bay and its surrounding community. Mahalo nui loa for your dedication and hard work.

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**From:** CariRose Aquino <[REDACTED]>  
**Sent:** Thursday, August 1, 2024 2:59 PM  
**To:** 221053-01 KS Keaouhou Entitlements  
**Subject:** Keaouhou Bay Support

**Categories:** Yellow Category

Aloha County of Hawaii, Planning Department,

As a proud graduate of Kamehameha Schools, I am writing to express my strong support for the Keaouhou Bay Management Plan Draft Environmental Impact Statement (EIS). The proposed improvements reflect a deep understanding and respect for our cultural heritage and the environment.

Keaouhou Bay holds significant cultural and historical importance, not only to our local community but also to the broader Native Hawaiian community. The initiatives outlined in the management plan, such as improved facilities, enhanced conservation efforts, and increased educational opportunities, are vital for preserving the bay's natural beauty and cultural significance for future generations.

The EIS provides a thorough assessment of potential environmental impacts and demonstrates a commitment to sustainable development. The heritage corridor will bring much needed care to the wahi pana sites found at Keaouhou Bay, while also providing an opportunity to educate those who come to the bay.

The 10+year long-range timing of developing the 150+ low impact lodging units mauka of the bay area gives planners and Kamehameha Schools time to fully realize the model such sustainable lodging could be for Hawaii. It's time to embrace sustainable lodging practices for our visitor industry.

I commend the planners for their thoughtful approach and encourage the swift adoption and implementation of this plan. It is through such efforts that we honor our present, and ensure a thriving future for Keaouhou Bay and its surrounding community.

Mahalo nui loa for your dedication and hard work.

Me ka ha'aha'a,  
Cari Coleman  
Kamehameha Schools Alumnus

**From:** CariRose Aquino [REDACTED]  
**Sent:** Thursday, August 1, 2024 2:59 PM  
**To:** 221053-01 KS Keaouhou Entitlements  
**Subject:** Keaouhou Bay Support

**Categories:** Green Category

Aloha County of Hawaii, Planning Department,

As a proud graduate of Kamehameha Schools, I am writing to express my strong support for the Keaouhou Bay Management Plan Draft Environmental Impact Statement (EIS). The proposed improvements reflect a deep understanding and respect for our cultural heritage and the environment.

Keaouhou Bay holds significant cultural and historical importance, not only to our local community but also to the broader Native Hawaiian community. The initiatives outlined in the management plan, such as improved facilities, enhanced conservation efforts, and increased educational opportunities, are vital for preserving the bay's natural beauty and cultural significance for future generations.

The EIS provides a thorough assessment of potential environmental impacts and demonstrates a commitment to sustainable development. The heritage corridor will bring much needed care to the wahi pana sites found at Keaouhou Bay, while also providing an opportunity to educate those who come to the bay.

The 10+year long-range timing of developing the 150+ low impact lodging units mauka of the bay area gives planners and Kamehameha Schools time to fully realize the model such sustainable lodging could be for Hawaii. It's time to embrace sustainable lodging practices for our visitor industry.

I commend the planners for their thoughtful approach and encourage the swift adoption and implementation of this plan. It is through such efforts that we honor our past, protect our present, and ensure a thriving future for Keaouhou Bay and its surrounding community.

Mahalo nui loa for your dedication and hard work.

Me ka ha'aha'a,  
Cari Coleman  
Kamehameha Schools Alumnus

## Rebecca Corby

Please do not allow Kam Schools to put a resort in Keauhou bay. We have plenty of resorts and hotels in Hawaii. We need to halt any new resorts and focus on preserving the precious natural resources of hawaii and make safe sustainable access to these natural wonders for local residents and visitors to enjoy with respect. That does not require more resorts. There are plenty of places for visitors to stay. Please protect this bay and do not develop it,

---

**From:** Rebecca Corby <[REDACTED]>  
**Sent:** Sunday, July 28, 2024 1:57 PM  
**To:** 221053-01 KS Keauhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning Internet Mail; Keauhoubay@ksbe.edu  
**Subject:** Save Keahou Bay  
**Categories:** Yellow Category

Please do not allow Kam Schools to put a resort in Keauhou bay. We have plenty of resorts and hotels in Hawaii. We need to halt any new resorts and focus on preserving the precious natural resources of hawaii and make safe sustainable access to these natural wonders for local residents and visitors to enjoy with respect.

That does not require more resorts. There are plenty of places for visitors to stay. Please protect this bay and do not develop it,

thank you,  
Rebecca Corby  
18 Year Hawaii Resident

mary cowen

Thank you for the comprehensive, informative report.

I support enhanced cultural and education facilities as described in the KBMP.

I DO NOT support development of a 150-unit transient accommodations lodge in this area. Hotel, condotel and other STVR opportunities exist in the area that are not at capacity.

I DO NOT support additional retail activities. Keauhou Shopping Center serves as the area's retail hub. Until all the medical service providers leased space there, retail space sat empty for years. There is not a need for more retail.

Thank you for considering Kona resident input on this major development.

Jakob Cox

First off, we do not need another shopping/cultural center in the Keauhou Bay. Second to use the GM of the Outrigger was a mistake since he sexually assaulted his employees. Third the people of Kona have fought to protect their cultural sites, and you think they want housing and shopping in an area where the local Ohana's already go, and could possibly lose or diminish access due to new development. We do not support this nor will we ever support building down in Keauhou



## Jennifer Dant

I really am having a hard time understanding why you would tear down the Keaouhou Beach hotel and turn it back into this beautiful historic area and yet want to develop Keaouhou bay into a boutique bungalow hotel. Makes no sense to me. We are already loosing so many battles to save what beautiful ocean coral we have and this will do so much damage. Not to mention all the pollution you will have to spray out to keep this new area up with landscaping and bug control. All that will wash into our ocean. Keaouhou bay is a quaint beautiful bay where I have the privilage to work and paddle out of and have been doing so for over 18 years. It would be great if the powers that be could have more of a positive influence instead of such a destructive one. We have been fighting fish collecting for years.... YEARS, how is this possible? We are loosing our fish and coral species at an alarming rate. Why isn't anyone else concerned about this??? Its a David vs. Goliath fight, and I know money is hard to be up against. But we the people beg you, rethink your future plans. Do whats best for our oceans and our beautiful island. Plant a community garden instead. Help the Aina, our Kai and our future keiki.

We need to expect better, we need to do better. This is the last chance we have to change the scales in the other direction. We are loosing our vital recourses at an alarming rate. Help the aina!

## Marc Davis

Aloha,

I as a resident of Hawai'i for 58 years am opposed to any development in this are or Bay on the Big Island of Hawai'i. The area should remain undeveloped except for limited infrastructure.

Please, DO NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their Bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keauhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.

#### ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keauhou Bay.

The Green Sea Turtle swims in Keauhou Bay weekly and the monk seal has also been seen swimming and resting in Keauhou Bay. Both of these marine animals are on the endangered species list.

Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/conservation/endangered-species-conservation/endangered-species-ac>

FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED

The green sea turtle is federally protected and can be seen in Keauhou Bay weekly.

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**From:** keauhoubay <keauhoubay@ksbe.edu>  
**Sent:** Tuesday, July 30, 2024 4:51 PM  
**To:** Keana Dawson  
**Cc:** 221053-01 KS Keauhou Entitlements; Alex.Roy@hawaiicounty.gov  
**Subject:** RE: [EXTERNAL] Kamehameha Schools EIS Draft For Keauhou Bay, WILL HAVE NEGATIVE IMPACT

**Categories:** Yellow Category

Aloha e Keana -

Thank you for your comments concerning the Keauhou Bay Management Plan, Draft Environmental Impact Statement. Your comments have been received and administratively recorded.

Comments received during the 45-day public comment period will be reproduced in the Final Environmental Impact Statement, and substantive comments addressed.

The County of Hawaii and our planning consultant, G70, are copied here on this email so that they receive a copy of your feedback.

We appreciate your involvement and contribution to the environmental review process. Your input is invaluable in helping us develop a management plan that reflects the needs and concerns of our community.

Thank you once again for your engagement and commitment to the future of Keauhou Bay.

Mahalo,

The Keauhou Bay Project Team

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**From:** Keana Dawson <[REDACTED]>  
**Sent:** Tuesday, July 30, 2024 1:32 PM  
**To:** keauhoubay <keauhoubay@ksbe.edu>  
**Subject:** [EXTERNAL] Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT

**CAUTION: This email is from an outside sender. Do not click on links or open attachments unless you recognize the sender and know the content is safe.**

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keauhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keauhou Bay as stated in all the different researched articles below.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Allowing this development WILL POLLUTE Keauhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keauhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

#### THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keauhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keauhou Bay will likely be changed forever.

This information is from a NOAA Scientist; "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie!' That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keauhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keauhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keauhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrscurrent/Vol103\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol103_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered

species." [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project.

#### GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "  
Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where the Hawaii government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keauhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

#### ALGAE BLOOMS KILL CORAL AND MARINE LIFE

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Cuana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution... " <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAHOUBAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

FURTHERMORE: "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

#### ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20says%20a%20new>

#### The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershed.org.au/blog/the-impact-of-stormwater-car-emissions/>

#### NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

if you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key

to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

LEARN FROM OTHERS:  
RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide...

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban runoff)." <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-impacts%20state%2Dwide>.

<https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-impacts%20state%2Dwide>.

This article is by the Coral Reef Alliance here in Hawaii. "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#~:text=Hawaii%20reefs%20face%20major%20global,into%20Hawaii%20waterways%20every%20day>.

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban runoff, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray

Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species>.

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs

provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0>

<https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_coral/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_coral/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water..." (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_coral/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_coral/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food

chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural runoff, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

#### HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keaouhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keaouhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by human-kind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information

PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20slitaton.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20study%20said.>

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science

Direct <https://www.sciencedirect.com/science/article/abs/pii/S00652888120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaJhJJAAnWAq453tRgN0jAiwel9jnR3ZoTv0PyGzA5lc\\_H0O1zcHNIP3ASnhcgKRY6\\_vkLPw49dbmBYoSq5YIMQjGBZsabdGCUH1701SLbu9x5P73xED4Kx14T0sJlvqJ1a72ZRT3rUbraxpodJd2A0NlSmWSuxB7jJEDdpJ8OGJpx7JTJWdCFXvFKJIZYeNdcJ3Sw\\_dnaUg5IZhIcjpBDImmaH15yqt15Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaJhJJAAnWAq453tRgN0jAiwel9jnR3ZoTv0PyGzA5lc_H0O1zcHNIP3ASnhcgKRY6_vkLPw49dbmBYoSq5YIMQjGBZsabdGCUH1701SLbu9x5P73xED4Kx14T0sJlvqJ1a72ZRT3rUbraxpodJd2A0NlSmWSuxB7jJEDdpJ8OGJpx7JTJWdCFXvFKJIZYeNdcJ3Sw_dnaUg5IZhIcjpBDImmaH15yqt15Q%3D&tracking_referrer=abcnews.go.com)

INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste each year." <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keaou Bay. On Hawaii Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawaii'i landfill

September 17, 2023

The West Hawaii'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawaii'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

A County commission drafts ordinance aiming to ban recyclables at West Hawaii'i landfill

By Megan Moseley September 6, 2023

Hawaii'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

17

During a commission meeting on July 26, Ramzi Mansour, Hawaii'i County Director of Environmental Management, told commissioners the West Hawaii'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Kaahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawaii'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

18

## Drought Conditions On Hawai'i Island Prompt Water Supply Message

by Big Island Video News  
on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information from the [U.S. Drought Monitor](#). There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawai%CA%BBi-island-prompt-water-supply-message/>

U.S.

Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to **significant droughts**, and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the **world's largest surfing wave pool** opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe."

"We are in a **water crisis**, that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawaii, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

UPDATE: HELCO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity us is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

Big power supply problems continue to plague Hawaii Island

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

21

## FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES

A Resort Development Will Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawaii News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state. This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

22

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: All of these roads only have two lanes!

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=-FQ5snPDjI8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawai'i Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC AND WASTEWATER:

1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawaii'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) "The overwhelming plastic waste Hawaii visitors leave behind By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A County commission drafts ordinance aiming to ban recyclables at West Hawaii landfill By Megan Moseley September 6, 2023 · 1:00 AM HST \* Updated September 6, 2023 · 2:02 PM

Hawaii'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawaii'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the

weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawaii'i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii'i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii'i Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs, Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii'i State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) HELCO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii'i Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii'i Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii'i's power system from its water system, said Kawika Uyebara, deputy director of Hawaii'i County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) News Hawaii'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawaii'i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video News on Nov 6, 2023 at 3:28 pm

(BIVN) — With an ongoing drought on the island of Hawaii'i, the Hawaii'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-CA%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/)

20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

#### HISTORICAL AND CULTURAL SIGNIFICANCE:

The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawaii. After being added back in 1978, the law is part of Hawaii's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
  - Knowing and doing what is pono (right)
  - Standing for the principle that leadership privilege is earned
  - Taking kuleana (responsibility) for those we serve
  - Doing so with compassion, love, and respect
- "We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

The Law of the Splintered Paddle is also on Kamehameha Schools website. The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.

#### IN CONCLUSION

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keauhou Bay and "The Endangered Species Act of 1973 (ESA or "The Act"; 16 U.S.C. § 1531 et seq.) is the primary law in the United States for protecting and conserving imperiled species. Designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President Richard Nixon on December 28, 1973. The Supreme Court of the United States described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation".<sup>[1]</sup> [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other. This land MUST be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come.

In addition to the natural disaster this will cause, Hawaii Island is already having serious infrastructure and resource issues that have yet to be solved. These issues MUST be solved before considering another resort development on Big Island.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is NOT suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen.

Please save Keauhou Bays marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.

Mahalo,

This message is the property of Kamehameha Schools and any attachments are confidential to the intended recipient at the e-mail address to which it has been addressed. If you are not the intended

recipient, you may not copy, forward, disclose or use any part of this message or its attachments. If you received this transmission in error please notify the sender immediately by e-mail or contact Kamehameha Schools at webmaster@ksbe.edu and then delete this message from your system.

## Marta Derieg

Before you destroy Keauhou Bay and strip the community of another beach access, I suggest you complete the work at the former Keauhou Beach Hotel, which is essentially inaccessible to the community. It saddens me the Kamehameha Schools is willing to continue decimating community access to resources.



Here is a research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton". There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation." [https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

The above articles show that development of Keauhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this will cause the manta ray food source to disappear. This will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on this tour to survive.

Here is another article that proves runoff from development in this area will hurt and kill plankton, by **Frontiers in Marine Science**, "**Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon**". The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-*a* concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019.."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The Chesapeake Bay has a foundation that is trying to save it due to runoff pollution that developments create, and the Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water, Keauhou Bay waters won't stand a chance if development above the bay is allowed because this bay is very small.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow.."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay because it is so much smaller than the Chesapeake Bay.

If you allow Keauhou Bay to be developed there will be a higher population in the bay and that will hurt the coral in the bay as well, because it's known that "Denser coastal populations...will lead to reef degradation by coastal constructions. Denser populations inland will lead to more runoff and situations..."

**Reason #3** a Resort Development WILL Increased Human Traffic In Keauhou Bay

Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regards to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information  
PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20silviculture>.

This article is by abc NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%20a%20new%20study%20said>.

If you allow this resort to be developed, you will be destroying the coral reefs in the bay because this bay is extremely small and used by a lot of locals already for fishing, canoeing, swimming, snorkeling, paddle boarding, surfing, boating...it can't afford more use by many thousands more people yearly.

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii: Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaHjJAnWAq453tRgNQAJaWel9jnR3ZoTvOPyGZA5Ic\\_H00IzCHNIP3ASnhcgKRv6\\_vKLPw49dbmBYoX5q3YIMgOIGBZsabdGUH7OISLbu9x5P3xED4KxI4T0sJlvgQIa7ZZR3tUbraxpodJd2AaNSImWSuXBT7JEDpJ8OGJpx7ITJWdCfXvFKJIZYeNdcJ3sw\\_dnaUg5IZlhcjPBDlImmaH15yqT5O%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaHjJAnWAq453tRgNQAJaWel9jnR3ZoTvOPyGZA5Ic_H00IzCHNIP3ASnhcgKRv6_vKLPw49dbmBYoX5q3YIMgOIGBZsabdGUH7OISLbu9x5P3xED4KxI4T0sJlvgQIa7ZZR3tUbraxpodJd2AaNSImWSuXBT7JEDpJ8OGJpx7ITJWdCfXvFKJIZYeNdcJ3sw_dnaUg5IZlhcjPBDlImmaH15yqT5O%3D&tracking_referrer=abcnews.go.com)

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%20based%20sources,and%20mortality%20in%20sensitive%20species>.

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide>.

All developments can't fully stop polluting because of runoff from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_coral/coral09\\_humannthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organism%20that%20can%20smother%20corals](https://oceanservice.noaa.gov/education/tutorial_coral/coral09_humannthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organism%20that%20can%20smother%20corals).

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_hu\\_manthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_hu_manthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

#### **Reason #4** a Resort Development WILL Increase Traffic

The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side.

Allowing another resort to be developed will bring more cars that will lead to a lot more traffic that the island can not handle, please read the articles below by different NEWS companies that prove this point.

This NEWS article by Hawaii News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Please watch their video on their link below because it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists comes more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state, This time last year Hawaii island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks...

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is the same for Big Island. The traffic problems they talk about are the same issues here on Big Island, and this article also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

Please, watch the NEWS video from the link below on aerial footage in Hilo because the footage shown is the same thing that is happening on Alii Drive and Queen K HWY, and for the same reasons.

There are 2 developments already on Alii Dr. being built as of today, and more are scheduled for this road in the near future, and Alii Dr. and Queen K HWY are the roads Kamehameha Schools Bungalow Resort will be using if approved and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow already.

The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well.

See the photo below that proves this point in Kona, and here is the NEWS article by KITV NEWS that talks about Hilo and the same thing is happening in Kona on the roads Kamehameha Schools wants to develop their resort, "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash on Alii Dr. and when there is an accident on this road, it turns into only one lane that needs a flagger to help direction traffic, and that adds even more traffic to this already seriously congested road, and Kamehameha Schools wants to add a resort on this road, and that will increase the traffic even more.

Here is the Island News video on the crash on Alii Dr.  
<https://www.youtube.com/watch?v=-FQSnPDjI8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Please read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawai'i Island.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path as well as The Law of the Splintered Paddle below <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

### **The Law of the Splintered Paddle**

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless (especially kupuna and keiki) across Hawai'i be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, the law is part of Hawai'i's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

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- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

**The Law of the Splintered Paddle** is also on Kamehameha Schools website, so they should want to help make Big Island roads become safer and not add to the traffic and possible traffic death toll problem. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

Besides a resort development in Keaouhou Bay causing runoffs that will severely pollute the bay as the above research and science articles have shown above causing marine life to die, it will also increase in the bay's population that will seriously add to damaging even more coral, plankton and all marine life as well, and the island has severe traffic issues already with increased death tolls rising, and a resort development in Keaouhou Bay will totally increase even more traffic in these already severely congested traffic areas.

**Reason #5** The Big Island Doesn't Have the Resources and Infrastructure for Another Resort

Please see the articles below because the Big Island doesn't have the resources or infrastructure to safely add another resort development on island and these other NEWS and Research articles prove this point.

1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity."

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) "The overwhelming plastic waste Hawaii visitors leave behind By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A county commission drafts ordinance aiming to ban recyclables at West Hawaii landfill By Megan Moseley September 6, 2023 · 1:00 AM HST \* Updated September 6, 2023 · 2:02 PM

Hawaii County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawaii Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai-ca-bbi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealahoe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii'i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii'i Department of Health," <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "BIG ISLAND NEWS HECO restores power after initiating emergency outages on Big Island by: Elizabeth Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii'i State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) "LOCAL NEWS

HECO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii'i Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii'i Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawika Uyehara, deputy director of Hawaii'i County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) U.S. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues  
By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "we're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) NewsHawaii'i County issues mandatory 25% water restriction for North Kona  
August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawaii Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai%CA%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to their homes to help with power issues on the island.

20) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reportng\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reportng_that_several_large/?rdt=52660)

21) "NewsHawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 - 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will damage Keaouhou Bay coral and marine life and, Big Island resources and infrastructure are currently being negatively affected from the development that is on island already, and there are years of new development that have already been approved, before having safe resources and infrastructures for new developments.

With these scientifically proven articles by some of the most professional scientists in the world, they say the a serious population increase, as well as development and resort runoff that happens because of parking lots, and... with all coastal developments, it will be dangerous for Keaouhou Bay to be development because it will damage the marine ecosystems in the area.

Please, save Keaouhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools because all of these articles prove it would be extremely damaging to the waters at Keaouhou Bay.

Thank you,

Sincerely,

Melanie Diehl

**From:** Davina <[REDACTED]>  
**Sent:** Wednesday, August 7, 2024 1:54 PM  
**To:** 221053-01 KS Keaouhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keaouhoubay@ksbe.edu  
**Subject:** Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT!

**Categories:** Yellow Category

To whom it may concern,

Please reject Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keaouhou Bay.

Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, *"What is the biggest source of pollution in the ocean?"* by NOAA, National Oceanic and Atmospheric Administration, states, *"When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides."* It also states, *"Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called nonpoint source pollution, which occurs as a result of runoff."*

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, *"Putting the Earth in Play: Environmental Awareness and Sports"*, shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keaouhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endanger these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,  
Donna Dufault  
aka Davina Mar

Live Aloha 🍀 Love Now

**From:** Davina <[REDACTED]>  
**Sent:** Wednesday, August 7, 2024 1:54 PM  
**To:** 221053-01 KS Keaouhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keaouhoubay@ksbe.edu  
**Subject:** Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT!

**Categories:** Green Category

To whom it may concern,

Please reject Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keaouhou Bay.

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Kind Regards,  
Donna Dufault  
aka Davina Mar

Aloha Kamehameha Schools and County of Hawaii Planning Department. Please accept my comments on the proposed Keauhou Bay Management Plan (KBMP) Draft Environmental Impact Statement.

1. First, let me say that this is the kind of document I'd like to see for *all County of Hawaii Planning Department environmental documents*. I realize this is a draft environmental impact statement (DEIS), and is triggered by state law, and other regulatory requirements. The document is well organized; the graphics, and photo simulations are appropriate and illustrative for this proposal. This is the caliber of document that can be created by a full-service environmental preparation firm that also has other disciplines within its practice.
2. I, however, do not support the proposal by Kamehameha Schools (KS) at this location. It is hard to accept the proposal and its re-sculpting of the land, re-organization of uses, and "need" to create a retail center; and 172 (or 189 with 10% of the units as a suite mix if I am understanding this correctly) bungalows with the mission and values that are promoted by KS (see Chapter 2, Purpose and Need for the Proposed Action). Please support Option 1, the No-Action Alternative, as this is the only solution that feels appropriate of this area.
3. I am not one to count other people's money, but please tell me how an organization that has assets totaling approximately \$14 Billion dollars "needs" to re-invigorate an area it feels is "underperforming economically". This is greed, pure and simple. I am not swayed by the \$125 Million dollars in costs to construct such a proposal. I do not see how the mission and values of KS align with the butchering of this special area.
4. Surely the four other key concerns in Section 2.6 Key Issues and Concerns - 1) the integrity of natural and cultural resources is threatened in the absence of a long-term comprehensive management plan; 2) incompatible uses at the bayfront create conflicts between users and disrespect for wahi pana; 3) Kamehameha Schools lands at Keauhou Bay are underutilized for educational programming; and 4) existing circulation patterns create congestion and safety concerns - can be accommodated and completed without the "need" to establish nearly 190 luxury hotel rooms.
5. In Chapter 2, Purpose and Need for the Proposed Action, this language is used:

"However, Kamehameha Schools does not have control over all external forces that create these conflicts (e.g. other bay landowners, use and access by the general public, or government regulations). Kamehameha Schools lands at the bay are also significantly impacted by unauthorized uses, trespassing, vandalism, and other unsanctioned activities.

I don't see how such "conflicts" are the catalyst for such a drastic change, and one that many in the community don't want.

6. Section 4.16.5, Adverse Environmental Effects that Cannot Be Avoided, identifies long and short term impacts. Pursuant to this section, these impacts are:

Long-term Effects

- A select portion of the Project Area may experience passive flooding as a result of 3.2 ft. of global SLR predicted by 2100. Kamehameha Schools is committed to proactively planning and designing the Project to be resilient to ensure the ongoing successful, safe, and sustainable operation of the bay for the foreseeable future.
- In the long term, traffic volumes in the immediate area are expected to remain similar to without Project conditions. Improved parking and site circulation is expected to have long-term beneficial effects on traffic and public safety.
- An increase in visitor accommodations will result in an increase in water consumption, wastewater disposal, and solid waste generation. Therefore, there will be increased demand on existing utilities and infrastructure. Where practical and feasible, sustainable design practices and technology will be utilized to reduce demand requirements.

There are numerous Planning projects that have been approved, and not built to fully understand how the Keauhou Bay proposal will further add to the cumulative negative impacts of this proposal on the community, such as traffic, whether there is water to provide to the proposal, and dealing with sewage. I've read the information in the DEIS; I find it hard to rely upon it given what the public knows about human error at wastewater treatment facilities, the amount of brown water alerts to avoid swimming at local west side beaches, and the inability to rely upon capacity issues at these facilities. I am skeptical.

And this is before the issue climate change and Sea Level Rise (SLR). It is ill-advised to spend the money KS anticipates to build such a project when it is adjacent to a bay that had and will continue to experience the negative effects of sea level rise.

7. Section 4.17, Unresolved Issues, identifies Potential unresolved issues associated with the Proposed Project, which include:

- Identifying long-term programming of cultural heritage area
- Identification of a developer and operator for the low-impact lodging
- Agreement with the County to coordinate treatment of walkways over County rights-of-way
- Coordination with County/Potential Licensee for the removal and possible relocation of the volleyball court
- Potential partnership with DOBOR to manage boat trailer parking areas

I believe that all of these issues can be worked through, without having to economically supercharge this area of Keauhou Bay. Identifying a developer and operator of a luxury boutique/curated resort vacation experience is a phantom issue and one that is created by KS because of this proposal.

8. Section 4.14.2, Economic and Fiscal Impacts, discusses that 1,484 short term construction and project related jobs would be created by this proposal. Slightly more than 10% of that, 159 jobs, would be permanent jobs. That hardly seems like a trade-off for the community. That few new jobs for the physical disruption to the area, let alone the heartache for what this proposal intends to create?

Where are the short term workers coming from? What roads are they using? Will they be housed locally? Will a construction staging area be built for the parking for these workers as well as the storage of construction equipment? I will re-read the document in case I missed language this addresses these issues.

9. Chapter 6 discusses the Alternatives to the Proposed Action. I am familiar with this section of the DEIS, as this is a requirement in a draft Environmental Impact Report (DEIR) in California where I worked as a Planning Director or Manager. Option 4, Conveyance Alternative, reads like a gut punch. If you don't like this proposal, KS could sell the land to a developer who would pursue its own highest and best use. Please do not threaten the community, KS. Continue to work with the people you claim you support.

10. Lastly, please clarify the issue of the potential new boat trailer parking illustrated on Figure 1-10 of the document. This is the only graphic that lists this as a "potential" use. All other figures - Figure 3-34, 3-35, and 3-47 - show this as a feature that would be established, and not a "potential" use.

Please choose Option 1, the No-Action Alternative, for this proposal. KS has not made a compelling case to re-sculpt, reorganize, and financially supercharge the uses at this location. This organization continues the story of "Broken Trust" when it uses the phrase that this area of Keauhou Bay and its management plan "underperforms economically". It is Kamehameha Schools that underperforms morally and ethically.

Mahalo.  
Elizabeth Dunn

bini easley

this area is currently being used by the youth for cultural practices. please expand youth activities and not give in to commercial opportunities Soon Hawaii will no longer be Hawaii but just a playground for tourists encouraging you to look forward to our Hawaiian children's future.

To Whom It May Concern,

Please read the scientific proof in this letter and **REJECT** Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort **WILL** have a **SERIOUS NEGATIVE IMPACT** on Keaouhou Bay as stated in all the different researched articles below.

Please, **DO NOT** risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have **ALWAYS** polluted the water in **EVERY** coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development **WILL** be **CHANGING** an Entire Ecosystem.

**ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT**

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keauhou Bay weekly and the monk seal has also been seen swimming and resting in Keauhou Bay. Both of these marine animals are on the endangered species list.

### **Endangered Species Act**

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) **PURPOSES.**—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

### **FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED**

The green sea turtle is federally protected and can be seen in Keauhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and

plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Allowing this development WILL POLLUTE Keauhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keauhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

### **THE ENDANGERED MONK SEAL WILL BE AFFECTED**

Keaouhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keaouhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keaouhou Bay will likely be changed forever.

This information is from a NOAA Scientist: "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie!'" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) [Chapter 195D](#) and Hawai'i

Administrative Rules (HAR) [13-124](#)." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keaouhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keaouhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keaouhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keaouhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrscurrent/Vol103\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol103_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keaouhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keaouhou Bay and the surrounding area during the building phase of this enormous project.

### **GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS**

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keaouhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable! Please read from Wikipedia, "

Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment

facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,discarge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,discarge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keaouhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keaouhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references. See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where the Hawaii government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keaouhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keaouhou Bay and for these endangered species habitat. Under Section 2 (b) of the Endangered Species Act - Keaouhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keaouhou Bay.

### **ALGAE BLOOMS KILL CORAL AND MARINE LIFE**

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer. When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course development. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem. Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution. . " <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms->

[and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/](https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-)

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

**FURTHERMORE:** "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

**ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN**

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want

to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats. " <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant>.

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects  
News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a [new report](#) from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-

based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearly%2085%20percent.pipeline%20spills%2C%20says%20a%20new>

The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershepherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

## **NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE**

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather

and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

### **LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS**

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments.

Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams... Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

### **MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN**

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays.

Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

It's Been Proven Developments Severely Pollute Nearby Waters Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawai'i. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide...

This was the third major bleaching episode in Hawai'i over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off)." <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,ad%20catastrophic%20impacts%20state%20wide.>

This article is by the Coral Reef Alliance here in Hawai'i. "An ecosystem under threat Hawai'i's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff... When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving

coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawai%CA%BBi's%20reefs%20face%20major%20global,into%20Hawai%CA%BBi's%20waterways%20every%20day>.

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report\\_does/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report_does/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019...

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawai'i." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>  
The coral all over Hawai'i has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species>.

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,service%20that%20coral%20reefs%20provide>.

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." <https://oceanservice.noaa.gov/education/>

[tutorial\\_coral/coral09\\_humantthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](#)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [It's Been Proven Resort Developments KILL Marine Life](https://oceanservice.noaa.gov/education/tutorial_coral/coral09_humantthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.</a></p></div><div data-bbox=)

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem... Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result

observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%20%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes

and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

## **HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH**

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?  
"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>  
And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of

life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles. If you allow this resort the amount of people in this bay will fully increase and, "Hawai'i's recent history has shown that the state's growing population can have an adverse effect on nearshore fish

populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature

Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20study%20said.> By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.> Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." <https://www.nature.com/articles/>

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### **INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS**

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?  
There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.  
Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste each year." <https://www.homebiogas.com/blog/hotels-waste-management/>  
As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort

Development at Keauhou Bay. On Hawai'i Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill  
September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill

By [Megan Moseley](#) September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill. During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions. Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics,

paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka‘ahumanu Highway in Waikōloa.

“Trying to site a new landfill is close to impossible,” Adams said.

“So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill.”

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to “divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste.”

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

Time’s Up For Landfills

‘Gentle’ demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawai‘i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn’t want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>  
Drought Conditions On Hawai‘i Island Prompt Water Supply Message

by Big Island Video News

on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawai‘i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai‘i island is under “Moderate Drought” conditions, according to the latest information from the [U.S. Drought Monitor](#). There is an area under “Abnormally Dry” conditions in South Kona, however there are other, small pockets on the Big Island that are under “Severe Drought”. There is even a small spot of “Extreme Drought” in the South Point area of Ka‘ū.

“The National Weather Service’s forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event,” reported the Hawai‘i County Department of Water Supply. “Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024.”

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawai%CA%BBi-island-prompt-water-supply-message/>  
U.S.

Hawaii is “on the verge of a greater catastrophe,” locals say, as water crisis continues

By [Li Cohen](#)

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to significant droughts, and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the world's largest surfing wave pool opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe." "We are in a water crisis, that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawai'i, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>  
Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

**UPDATE: HELCO asks for continued energy conservation  
BY SPECTRUM NEWS STAFF HAWAII ISLAND  
UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM  
ET APR. 15, 2024**

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand. "We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity us is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages." Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/helco-customers-on-hawaii-island-asked-to-conserve-power->

Big power supply problems continue to plague Hawaii Island  
Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island <https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

#### FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES

A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS? A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawai'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state. This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes. "We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen

K Highway, and for all the same reasons: All of these roads only have two lanes!

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." <https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/>

[article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=-FQSnPDji8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii'i Island...

Here are some other statistics that are even more staggering:

- 28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees
- 13% of pedestrians hit at 20 mph actually suffer fatality
- 73% of pedestrians hit at 40 mph suffer fatality
- 25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!
- 56% of fatal crashes were the result of alcohol or drugs
- 41% of fatal crashes occurred in light trucks and vans
- 49% of crashes occur during the day, outside of peak traffic hours
- Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

### **MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC and WASTEWATER:**

- 1) Hawaii Deals with Burgeoning Waste Management Problem  
As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues.  
Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawaii'i Sanitary Landfill reaching capacity.

The West Hawaii'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawaii'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of

Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM

officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support.” <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) “The overwhelming plastic waste Hawaii visitors leave behind By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists’ first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips.” <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) “A County commission drafts ordinance aiming to ban recyclables at West Hawai‘i landfill By Megan Moseley September 6, 2023 · 1:00 AM HST

\* Updated September 6, 2023 · 2:02 PM

Hawai‘i County’s Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island’s only working landfill.” <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) ” Hawai‘i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.” <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) “Hawai‘i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAI‘I COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions.” <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai%CA%BBi-under-severe-drought/>

9) “Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona.” <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) “Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawai‘i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawai‘i Department of Health.” <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) ”Kona coast faces stark wastewater tradeoffs, Current situation There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST \* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) HELCO issues rolling power outages around Big Island by:

Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night."

<https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawai'i's water supply Hawai'i Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST Water departments on O'ahu and Hawai'i Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply? It is impossible to separate Hawai'i's power system from its water system, said Kawika Uyehara, deputy director of Hawai'i County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>  
17) News Hawai'i County issues mandatory 25% water restriction for North Kona

August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawai'i Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News

on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely

monitoring its 23 public water systems, with a “special focus” placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai%CA%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/?rdt=52660)

20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

## **HISTORICAL AND CULTURAL SIGNIFICANCE:**

The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law “Ke Kānāwai Māmalahoe” or “the Law of the Splintered Paddle.” Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai‘i. After being added back in 1978, the law is part of Hawaii’s State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

-Caring for and serving one’s people

-Knowing and doing what is pono (right)

-Standing for the principle that leadership privilege is earned

-Taking kuleana (responsibility) for those we serve

-Doing so with compassion, love, and respect

“We take that to mean that anyone who uses our roadways should be able to do so without fear of harm,” explains Tina.”

The Law of the Splintered Paddle is also on Kamehameha Schools website. The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.

### **IN CONCLUSION**

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keauhou Bay and "The Endangered Species Act of 1973 (ESA or "The Act"; 16 U.S.C. § 1531 et seq.) is the primary law in the United States for protecting and conserving imperiled species. Designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untimpered by adequate concern and conservation", the ESA was signed into law by President Richard Nixon on December 28, 1973. The Supreme Court of the United States described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation".

[1] [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other. This land **MUST** be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come.

In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved. These issues **MUST** be solved before considering another resort development on Big Island.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is **NOT** suitable for this kind of development for both environmental and infrastructure reasons. The cost of what stands to be lost is far too high to allow this to happen.

Please save Keauhou Bay's marine life and help the island's resources by saying **NO** to a Bungalow Resort built by Kamehameha Schools.

Please reject this EIS because Kamehameha Schools has **NOT ACKNOWLEDGED OR ASKED** thousands of Hawaiians, or Hawaiian Descendants from Keauhou Bay how they feel about developing this land, Keauhou Bay.

They have asked **ONLY** a few families on an island that has thousands of Hawaiian people and here is video testimony from Kupuna Kumu Lily Kong who is a Keauhou Bay descendants and her and her mother **OPPOSE DEVELOPMENT!** <https://vimeo.com/994680462>

Kupuna Kumu Lily Kong who was born in Keauhou Bay and she states that she is against development. She also states that her mother was against development as well. Please listen to her words

in her testimonial video about Keauhou Bay on this link and know that this proves that descendant directly from Keauhou Bay OPPOSE THIS DEVELOPMENT <https://vimeo.com/994680462> and it is CULTURAL LAW THEY MUST BE HEARD AND ACKNOWLEDGED!

These laws were created, “After these legal victories, the Kohanaiki ‘Ohana worked to create a new law in the state of Hawaii to require Cultural Impact Statements along with Environmental Impact Statements for all future large-scale development. Act 50, the Cultural Impact Statement Law was adopted in 2000.” <https://kohanaikiohana.org/legal-victories>

Kupuna Kumu Lily Kong also states that there are burial grounds on the land that Kamehameha Schools wants to clear and it is told that Kamehameha Schools has bulldozed sacred land in the past and Keauhou Bay’s burial grounds MUST BE RESPECTED AND NOT DISTURBED!

Hawaiians locals have said that there were bones in the small cave that is at the base of Keauhou Bay. These burials need to take priority over a Bungalow Resort Development.

There are over 6,219 signatures as of Aug. 5th (these signatures grow daily) and these signatures are Hawaiians, locals and tourist and some of these Hawaiians have left comments on why they are opposing this development.

**ALL OF THESE PEOPLE HAVE A RIGHT TO BE ACKNOWLEDGED AND THEIR VOICES HAVE VALUE TO BE HEARD, THESE PEOPLE MATTER AND IT IS CULTURAL LAW THEY MUST BE ACKNOWLEDGED!**

Here is the petition link with thousands of Hawaiian signatures and comments opposing Kamehameha Schools Bungalow Resort Development. Please read these signatures and comments! <https://www.change.org/p/save-keauhou-bay-from-becoming-a-big-crowded-resort?>

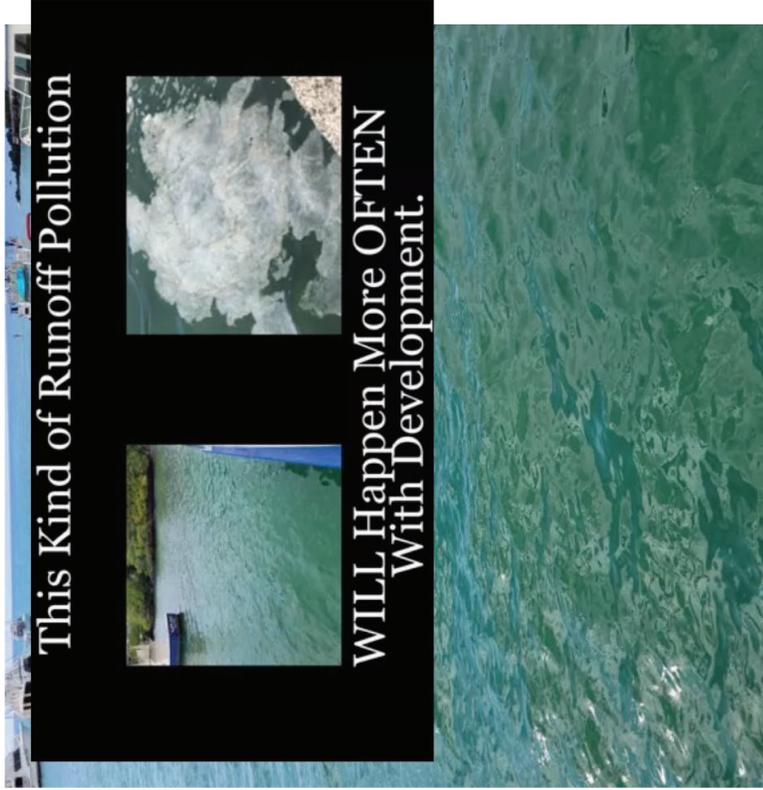
[utm\\_source=share\\_petition&utm\\_medium=custom\\_url&recruited\\_by\\_id=92a53560-1e91-11e5-b4ef-b94e90cedbdd](https://www.change.org/p/save-keauhou-bay-from-becoming-a-big-crowded-resort?utm_source=share_petition&utm_medium=custom_url&recruited_by_id=92a53560-1e91-11e5-b4ef-b94e90cedbdd)

Please reject this EIS because under Princess Bernice Pauahi Bishop’s Will it states Kamehameha Schools are her trustees and they have a “fiduciary duty” to do what is best for THEIR BENEFICIARIES (the Hawaiian people’s) and a Bungalow Resort is BEST FOR TOURISTS NOT THE HAWAIIAN PEOPLE BECAUSE THOUSANDS OF HAWAIIAN PEOPLE SINGED THE ABOVE PETITION OPPOSING KAMEAHMEHA SCHOOLS BUNGALOW RESORT.

Please reject this EIS because the Big Island DOES NOT HAVE THE RESOURCES TO PROVIDE FOR ANOTHER BIG RESORT ON ISLAND and there are 445 signatures with many comments that agree with this fact because of the factual reported articles in the Help Prioritize Big Island Developments to Keep Island’s Resources Safe for ALL petition. Please read this petition, all the signatures and comments <https://www.change.org/p/help-prioritize-big-island-developments-to-keep-island-s-resources-safe-for-all>

Mahalo,  
Rayann Ebreo





To Whom It May Concern,

Please read the scientific proof in this letter and **REJECT** Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort **WILL** have a **SERIOUS NEGATIVE IMPACT** on Keaouhou Bay as stated in all the different researched articles below.

Please, **DO NOT** risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have **ALWAYS** polluted the water in **EVERY** coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development **WILL** be **CHANGING** an Entire Ecosystem.

**ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT**

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keauhou Bay weekly and the monk seal has also been seen swimming and resting in Keauhou Bay. Both of these marine animals are on the endangered species list.

### **Endangered Species Act**

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) **PURPOSES.**—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

### **FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED**

The green sea turtle is federally protected and can be seen in Keauhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and

plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Allowing this development WILL POLLUTE Keauhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keauhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

### **THE ENDANGERED MONK SEAL WILL BE AFFECTED**

Keaouhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keaouhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keaouhou Bay will likely be changed forever.

This information is from a NOAA Scientist: "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) [Chapter 195D](#) and Hawai'i

Administrative Rules (HAR) [13-124](#)." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keaouhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keaouhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keaouhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keaouhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrscurrent/Vol103\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol103_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keaouhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keaouhou Bay and the surrounding area during the building phase of this enormous project.

### **GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS**

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keaouhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable! Please read from Wikipedia, "Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment

facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,discarge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,discarge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keaouhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keaouhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references. See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where the Hawai'i government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keaouhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keaouhou Bay and for these endangered species habitat. Under Section 2 (b) of the Endangered Species Act - Keaouhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keaouhou Bay.

### **ALGAE BLOOMS KILL CORAL AND MARINE LIFE**

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer. When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem. Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution. . " <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms->

[and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/](https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-)

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

FURTHERMORE: "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

**ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN**

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want

to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats. " <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant>.

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects  
News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a [new report](#) from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-

based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearly%2085%20percent.pipeline%20spills%2C%20says%20a%20new>

The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershepherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

## **NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE**

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather

and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

### **LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS**

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments.

Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams... Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

### **MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN**

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

It's Been Proven Developments Severely Pollute Nearby Waters Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawai'i. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide...

This was the third major bleaching episode in Hawai'i over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off)." <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,hard%20catastrophic%20impacts%20state%20wide.>

This article is by the Coral Reef Alliance here in Hawai'i. "An ecosystem under threat Hawai'i's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff... When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving

coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawai%CA%BBi's%20reefs%20face%20major%20global,into%20Hawai%CA%BBi's%20waterways%20every%20day>.

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report\\_does/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report_does/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019...

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawai'i." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>  
The coral all over Hawai'i has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species>.

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,service%20that%20coral%20reefs%20provide>.

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." <https://oceanservice.noaa.gov/education/>

[tutorial\\_coral/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](#)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [It's Been Proven Resort Developments KILL Marine Life](https://oceanservice.noaa.gov/education/tutorial_coral/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.</a></p></div><div data-bbox=)

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem... Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result

observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%20%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes

and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

## **HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH**

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?  
"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>  
And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of

life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles. If you allow this resort the amount of people in this bay will fully increase and, "Hawai'i's recent history has shown that the state's growing population can have an adverse effect on nearshore fish

populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature

Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20study%20said.> By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.> Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." <https://www.nature.com/articles/>

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### **INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS**

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?  
There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.  
Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste each year." <https://www.homebiogas.com/blog/hotels-waste-management/>  
As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort

Development at Keauhou Bay. On Hawai'i Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill  
September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill

By [Megan Moseley](#) September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill. During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions. Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics,

paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka‘ahumanu Highway in Waikōloa.

“Trying to site a new landfill is close to impossible,” Adams said. “So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill.”

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to “divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste.”

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

Time’s Up For Landfills

‘Gentle’ demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawai‘i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn’t want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>  
Drought Conditions On Hawai‘i Island Prompt Water Supply Message

by Big Island Video News

on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawai‘i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai‘i island is under “Moderate Drought” conditions, according to the latest information from the [U.S. Drought Monitor](#). There is an area under “Abnormally Dry” conditions in South Kona, however there are other, small pockets on the Big Island that are under “Severe Drought”. There is even a small spot of “Extreme Drought” in the South Point area of Ka‘ū.

“The National Weather Service’s forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event,” reported the Hawai‘i County Department of Water Supply. “Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024.”

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawai%CA%BBi-island-prompt-water-supply-message/>  
U.S.

Hawaii is “on the verge of a greater catastrophe,” locals say, as water crisis continues

By [Li Cohen](#)

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to significant droughts, and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the world's largest surfing wave pool opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe." "We are in a water crisis, that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawai'i, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>  
Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

**UPDATE: HELCO asks for continued energy conservation  
BY SPECTRUM NEWS STAFF HAWAII ISLAND  
UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM  
ET APR. 15, 2024**

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand. "We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity us is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages." Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/helco-customers-on-hawaii-island-asked-to-conserve-power->

Big power supply problems continue to plague Hawaii Island  
Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island <https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

#### FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES

A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS? A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawai'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state. This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes. "We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen

K Highway, and for all the same reasons: All of these roads only have two lanes!

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly. In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." <https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/>

[article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=-FQSnPDji8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii's Island...

Here are some other statistics that are even more staggering:

- 28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees
- 13% of pedestrians hit at 20 mph actually suffer fatality
- 73% of pedestrians hit at 40 mph suffer fatality
- 25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!
- 56% of fatal crashes were the result of alcohol or drugs
- 41% of fatal crashes occurred in light trucks and vans
- 49% of crashes occur during the day, outside of peak traffic hours
- Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

### **MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC and WASTEWATER:**

- 1) Hawaii Deals with Burgeoning Waste Management Problem As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawaii's Sanitary Landfill reaching capacity.

The West Hawaii's Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawaii's Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of

Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM

officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support.” <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) “The overwhelming plastic waste Hawaii visitors leave behind By Natasha Bourlin Aug 24, 2023  
Hawaii saw more than 9 million visitors last year. Those tourists’ first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips.” <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) “A County commission drafts ordinance aiming to ban recyclables at West Hawai‘i landfill By Megan Moseley September 6, 2023 · 1:00 AM HST

\* Updated September 6, 2023 · 2:02 PM  
Hawai‘i County’s Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island’s only working landfill.” <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) ” Hawai‘i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST  
A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.” <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) “Hawai‘i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAI‘I COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions.” <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai%CA%BBi-under-severe-drought/>

9) “Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona.” <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) “Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawai‘i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawai‘i Department of Health.” <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) ”Kona coast faces stark wastewater tradeoffs, Current situation There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST \* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) HELCO issues rolling power outages around Big Island by:

Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night."

<https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawai'i's water supply Hawai'i Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST Water departments on O'ahu and Hawai'i Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply? It is impossible to separate Hawai'i's power system from its water system, said Kawika Uyehara, deputy director of Hawai'i County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>  
17) News Hawai'i County issues mandatory 25% water restriction for North Kona

August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawai'i Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News

on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely

monitoring its 23 public water systems, with a “special focus” placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai%CA%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/?rdt=52660)

20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

## **HISTORICAL AND CULTURAL SIGNIFICANCE:**

The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law “Ke Kānāwai Māmalahoe” or “the Law of the Splintered Paddle.” Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai‘i. After being added back in 1978, the law is part of Hawaii’s State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

-Caring for and serving one’s people

-Knowing and doing what is pono (right)

-Standing for the principle that leadership privilege is earned

-Taking kuleana (responsibility) for those we serve

-Doing so with compassion, love, and respect

“We take that to mean that anyone who uses our roadways should be able to do so without fear of harm,” explains Tina.”

The Law of the Splintered Paddle is also on Kamehameha Schools website. The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.

### **IN CONCLUSION**

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keauhou Bay and "The Endangered Species Act of 1973 (ESA or "The Act"; 16 U.S.C. § 1531 et seq.) is the primary law in the United States for protecting and conserving imperiled species. Designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untimpered by adequate concern and conservation", the ESA was signed into law by President Richard Nixon on December 28, 1973. The Supreme Court of the United States described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation".

[1] [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other. This land **MUST** be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come.

In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved. These issues **MUST** be solved before considering another resort development on Big Island.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is **NOT** suitable for this kind of development for both environmental and infrastructure reasons. The cost of what stands to be lost is far too high to allow this to happen.

Please save Keauhou Bay's marine life and help the island's resources by saying **NO** to a Bungalow Resort built by Kamehameha Schools.

Please reject this EIS because Kamehameha Schools has **NOT ACKNOWLEDGED OR ASKED** thousands of Hawaiians, or Hawaiian Descendants from Keauhou Bay how they feel about developing this land, Keauhou Bay.

They have asked **ONLY** a few families on an island that has thousands of Hawaiian people and here is video testimony from Kupuna Kumu Lily Kong who is a Keauhou Bay descendants and her and her mother **OPPOSE DEVELOPMENT!** <https://vimeo.com/994680462>

Kupuna Kumu Lily Kong who was born in Keauhou Bay and she states that she is against development. She also states that her mother was against development as well. Please listen to her words

in her testimonial video about Keauhou Bay on this link and know that this proves that descendant directly from Keauhou Bay OPPOSE THIS DEVELOPMENT <https://vimeo.com/994680462> and it is CULTURAL LAW THEY MUST BE HEARD AND ACKNOWLEDGED!

These laws were created, “After these legal victories, the Kohanaiki ‘Ohana worked to create a new law in the state of Hawaii to require Cultural Impact Statements along with Environmental Impact Statements for all future large-scale development. Act 50, the Cultural Impact Statement Law was adopted in 2000.” <https://kohanaikiohana.org/legal-victories>

Kupuna Kumu Lily Kong also states that there are burial grounds on the land that Kamehameha Schools wants to clear and it is told that Kamehameha Schools has bulldozed sacred land in the past and Keauhou Bay’s burial grounds MUST BE RESPECTED AND NOT DISTURBED!

Hawaiians locals have said that there were bones in the small cave that is at the base of Keauhou Bay. These burials need to take priority over a Bungalow Resort Development.

There are over 6,219 signatures as of Aug. 5th (these signatures grow daily) and these signatures are Hawaiians, locals and tourist and some of these Hawaiians have left comments on why they are opposing this development.

ALL OF THESE PEOPLE HAVE A RIGHT TO BE ACKNOWLEDGED AND THEIR VOICES HAVE VALUE TO BE HEARD, THESE PEOPLE MATTER AND IT IS CULTURAL LAW THEY MUST BE ACKNOWLEDGED!

Here is the petition link with thousands of Hawaiian signatures and comments opposing Kamehameha Schools Bungalow Resort Development. Please read these signatures and comments! <https://www.change.org/p/save-keauhou-bay-from-becoming-a-big-crowded-resort?>

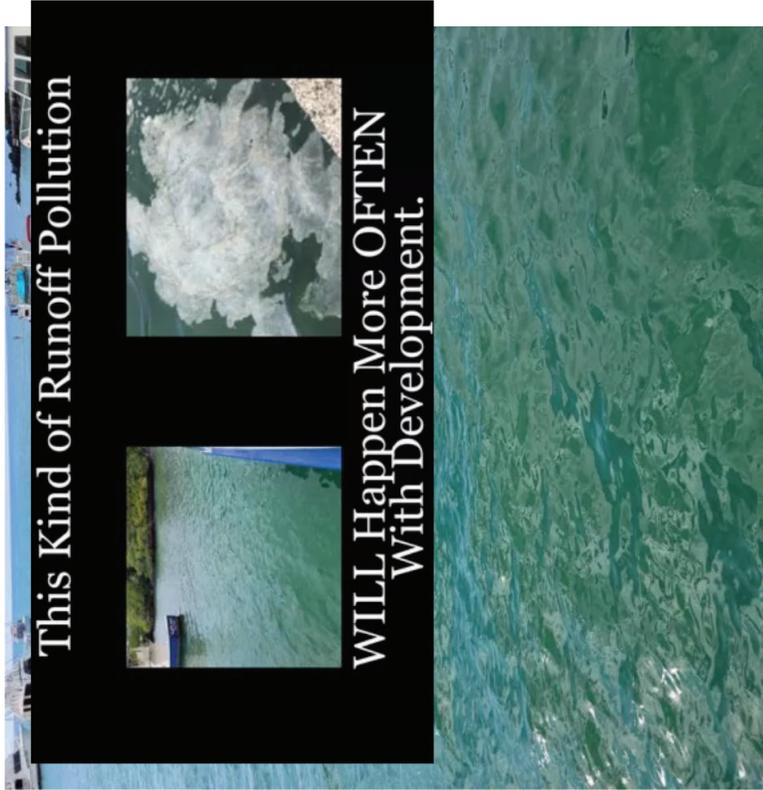
[utm\\_source=share\\_petition&utm\\_medium=custom\\_url&recruited\\_by\\_id=92a53560-1e91-11e5-b4ef-b94e90cedbdd](https://www.change.org/p/save-keauhou-bay-from-becoming-a-big-crowded-resort?utm_source=share_petition&utm_medium=custom_url&recruited_by_id=92a53560-1e91-11e5-b4ef-b94e90cedbdd)

Please reject this EIS because under Princess Bernice Pauahi Bishop’s Will it states Kamehameha Schools are her trustees and they have a “fiduciary duty” to do what is best for THEIR BENEFICIARIES (the Hawaiian people’s) and a Bungalow Resort is BEST FOR TOURISTS NOT THE HAWAIIAN PEOPLE BECAUSE THOUSANDS OF HAWAIIAN PEOPLE SINGED THE ABOVE PETITION OPPOSING KAMEAHMEHA SCHOOLS BUNGALOW RESORT.

Please reject this EIS because the Big Island DOES NOT HAVE THE RESOURCES TO PROVIDE FOR ANOTHER BIG RESORT ON ISLAND and there are 445 signatures with many comments that agree with this fact because of the factual reported articles in the Help Prioritize Big Island Developments to Keep Island’s Resources Safe for ALL petition. Please read this petition, all the signatures and comments <https://www.change.org/p/help-prioritize-big-island-developments-to-keep-island-s-resources-safe-for-all>

Mahalo,  
Rayann Ebreo





## Ann Eshabarr

Aloha,

I'm writing to protect Keauhou Bay.

There's always talk about building and little talk about the impact and infrastructure. Water pollution, traffic, wild life and the desecration of sacred land are just a few of the things I'm concerned about. Please don't allow this development. It's a heartbreaking thought. Keauhou Bay is a very special place and should remain as is with its natural beauty and mana.

Mahalo,

Ann Barrett Eshabarr.

## Denise Fadem

No more. No more building we have more than enough. STOP

## Dale Fergerstrom

My name is Dale Fergerstrom and I am in favor of Kamehameha Schools Management Plan for its lands surrounding Keaouhou Bay in Kona. I was born in Laupahoehoe Hawai'i island in 1952 and have lived my whole life on this island. I am a retired police officer with the Hawai'i County Police Department with my last assignment being the District Commander for Kona.

I am heavily involved in perpetuating the traditions and practices of the Traditional Hawaiian Canoe and visit Keaouhou Bay on a regular basis for the past 23 years. I am pleased with Kamehameha Schools effort to bring some order to the commercial over-exploitation of Keaouhou by setting forth a plan that will move a significant amount of this commercial activity away from the head of the bay and away from the Birth Site of Ali'i Kauikeouli (Kamehameha III). This move will bring some dignity back to this important Historical site.

I would like to note that some of the behavior of visitors in and around this birth site would not be tolerated by the community or the government if it were to take place at the Lincoln Memorial or the Birth Site of any of the past American Presidents.

And while this plan calling for the construction of a modest hotel on the upper sections of Kamehameha School lands mauka of the bay seems to contradict the premise of reducing commercial congestion and has raised concern in the community, it must be remembered that this whole infrastructure fix is being paid for solely by Kamehameha Schools. Kamehameha Schools will receive no financial or other help from anyone in creating or maintaining the infrastructure being proposed here. Unlike Government, KS must be able to make this endeavor self-supporting.

And no one has pointed out that much of the commercial congestion of Keaouhou Bay has been caused by the State of Hawai'i. The State's mismanagement of commercial ocean permits for this bay has played a significant role in the problems facing Keaouhou and they have not been caused by Kamehameha Schools or any of its programs.

In addition Kamehameha Schools, in this plan, is trying to bring some relief to the congestion of private small boat fishermen who are forced to use Keaouhou bay because of the shutting down the Kailua Pier Boat ramp to private boat owners after the 9-11 attack on New York City 13 years ago. The State has known full well the pressure this closure has placed on Keaouhou Bay and has done little to address it.

Again Kamehameha schools is attempting to address problems significantly caused by Government Mismanagement of this resource while receiving no financial assistance from anyone. I also feel that Kamehameha Schools commitment to the concept of "Aloha 'Aina" will ensure it will work diligently to address any environmental issues not addressed in the Environmental Impact Statement should they arise. And if they don't you can be assured that Hawaiians will hold KS accountable as we have done in the not too distant past.

creating the roadway, sewer, utilities, plus construction and furnishings. Financing to renovate and upgrade the Outrigger might be a far safer ROI for KS. I also question that the claim cited in the first paragraph of section 2.1.3 “the hustle and bustle of ocean commercial operations catering mainly to visitors cause many local families, with some long-standing generational ties to the bay, to no longer feel welcomed”. While this may be true in the case of a very few individuals, it doesn’t substantiate the investment to solve their feelings.

I would suggest a 2.3.4 Alternative Action which would address the Heritage area improvements, the parking, boat storage (again for short-term storage only), congestion at the Pier area and repositioning the commercial bayfront activity from the pier area to the corner of Old Government Road and Ehukai St. I think this would provide a much better ROI for the Trust and at the same time accomplish its heritage goals.



Thank you.

Tom Fetter

cc: Emily Davids

Via Email & USPS

August 6, 2024

Group 70 International, Inc.  
Attn: Kawika McKeague, Principal Planner  
111 S. King Street, Suite 170  
Honolulu, HI 96813

Re: Keauhou Bay Management Plan Comments

Dear Mr. McKeague,

My name is Thompson Fetter and I have reviewed both the original 2022 and the 2024 DEIS. These contain valuable information but little financial analysis. If generating income is a key objective of the Trust, then there should be more emphasis on the financial aspects.

Since 2013 I have owned a residence at 76-120 Holua Rd on Keauhou Bay. I have observed the activities and uses of the bay firsthand. Our observation is that Keauhou Bay is currently utilized almost to capacity in the following areas:

- Automobile parking
- Boat storage (some of which is long-term and need not be adjacent to the water)
- Permanent moorings in the Bay
- Launch ramp capacity and trailer parking
- Commercial boat operations to provide visitor trips to Kealakekua Bay and Manta Ray experience (these involve up to 200 or more people a day)

The Bay also clearly has historical significance and is a site which deserves recognition. In its present state, the Bay and its immediate surrounding area are heavily utilized already. I question the assumption that there is room for significant economic growth. The lodging capacity at the former Sheraton Hotel, now the Outrigger, is far from fully utilized. I question the KS assumption that an adequate Return on Investment can be generated from the development of 150 boutique short-term rental units as proposed. This involves

August 5, 2024

Cindy Freitas

[REDACTED]  
Kamehameha Schools: Kawaiha' o Plaza  
Marissa Harman  
Keahouabay@ksbe.edu

G70  
Kawika McKeague  
Keahouabay@g70.design

County of Hawaii,  
Planning Department  
Alex Roy

RE: Comment Period for Keahou Bay Management Plan Draft EIS

He Mele komo a he mele aloha no na kupuna o ke au i hala Aloha mai kakou.

Aloha,

My name is Cindy Freitas and I'm a Native Hawaiian descended of the native inhabitants of Hawai'i prior to 1778 and born and raised in Hawai'i. I am also a practitioner who still practice the cultural traditional customary practices that was instill in me by my grandparents at a young age from mauka (MOUNTAIN TO SEA) to makai in many areas.

I OPPOSE this Plan due to the following reasons:

Construction will have significant cumulative adverse impacts on cultural, archaeological, native plants, rare plants and animal species and historic elements resources in the proposed 29 acre parcel situated in the Keahou: TMS: (3) 7-8-012:098 (1.08 acres); (3) 7-8-012:101 (0.12 acres); (3) 7-8-012:048 (0.37 acres); (3) 7-8-010:044 that is **irreversible**.

SIHP # Ho'okuku Pond; SIHP # Kamau' ai Heiau; SIHP # 04621 Ka'io'ena or Keahiolo Heiau; SIHP # 3813 Opukaha Heiau; Aha A 'Umi Heiau; Modern House Platform; Kamohoolii Heiau; SIHP # 24264 Mo'ikeha Cave; Kaopa Well; Kualalua Braekis seepage; SIHP # 23911 Kaukulaelae Heiau; SIHP # 23912 Platform; SIHP # 23913 Platform with three layer of retaining wall; Kaimuki pit; SIHP # 24256 Possible house terrace; SIHP # 24267 Low enclosure; SIHP # 4348 Birth site of Kauikeaouli; SIHP # 5674 Platform; Mound that may contain burial; Fishermen campground; Octopus lure; Coral disc; Prehistoric use of the area; SIHP # 5695 Subsurface cultural deposit; Papamu; Temp. 736-1 Serveral walls that probably served as property boundaries; SIHP # 24216 Historic complex, two stacked rock walls, Modified outcrop interpreted as a possible historic ag clearing mound, retaining wall, Prepared niche interpreted as a storage feature; SIHP # 24265 Complex; SIHP # 24266 Habitation site; and other site that is not recorded.

The Constitution of the State of Hawai'i clearly states the duty of the State and its

Cindy Freitas

My name is Cindy Freitas and I'm a Native Hawaiian descended of the native inhabitants of Hawai'i prior to 1778 and born and raised in Hawai'i. I am also a practitioner who still practice the cultural traditional customary practices that was instill in me by my grandparents at a young age from mauka (MOUNTAIN TO SEA) to makai in many areas. I OPPOSE this Plan due to the following reasons: Construction will have significant cumulative adverse impacts on cultural, archaeological, native plants, rare plants and animal species and historic elements resources in the proposed 29 acre parcel situated in the Keahou: TMS: (3) 7-8-012:098 (1.08 acres); (3) 7-8-012:101 (0.12 acres); (3) 7-8-012:048 (0.37 acres); (3) 7-8-010:044 that is irreversible. SIHP # Ho'okuku Pond; SIHP # Kamau' ai Heiau; SIHP # 04621 Ka'io'ena or Keahiolo Heiau; SIHP # 3813 Opukaha Heiau; Aha A 'Umi Heiau; Modern House Platform; Kamohoolii Heiau; SIHP # 24264 Mo'ikeha Cave; Kaopa Well; Kualalua Braekis seepage; SIHP # 23911 Kaukulaelae Heiau; SIHP # 23912 Platform; SIHP # 23913 Platform with three layer of retaining wall; Kaimuki pit; SIHP # 24256 Possible house terrace; SIHP # 24267 Low enclosure; SIHP # 4348 Birth site of Kauikeaouli; SIHP # 5674 Platform; Mound that may contain burial; Fishermen campground; Octopus lure; Coral disc; Prehistoric use of the area; SIHP # 5695 Subsurface cultural deposit; Papamu; Temp. 736-1 Serveral walls that probably served as property boundaries; SIHP # 24216 Historic complex, two stacked rock walls, Modified outcrop interpreted as a possible historic ag clearing mound, retaining wall, Prepared niche interpreted as a storage feature; SIHP # 24265 Complex; SIHP # 24266 Habitation site; and other site that is not recorded. The Constitution of the State of Hawai'i clearly states the duty of the State and its agencies is to preserve, protect, and prevent interference with the traditional and customary rights of native Hawaiians. Article XII, Section 7 requires the State to "protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua'a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778" (2000). In spite of the establishment of the foreign concept of private ownership and western-style government, Kamehameha III (Kauikeaouli) preserved the peoples traditional right to subsistence. As a result in 1850, the Hawaiian Government confirmed the traditional access rights to native Hawaiian ahupua'a tenants to gather specific natural resources for customary uses from undeveloped private property and waterways under the Hawaiian Revised Statutes (HRS) 7-1. In 1992, the State of Hawai'i Supreme Court, reaffirmed HRS 7-1 and expanded it to include, "native Hawaiian rights...may extend beyond the ahupua'a in which a native Hawaiian resides where such rights have been customarily and traditionally exercised in this manner" (Pele Defense Fund v. Pay, 73 Haw.578, 1992). Act 50, enacted by the Legislature of the State of Hawaii (2000) with House Bill 2895, relating to Environmental Impact Statements, proposes that: "...there is a need to clarify that the preparation of environmental assessments or environmental impact statement should identify and address effects on Hawai'i's culture, and traditional and customary rights...[H.L.B. NO. 2895] Act 16, enacted by the Legislature of the State of Hawaii (2020) with S.B. No. 2060 Section 3; (2) Historic resources; (A) Protect, preserve, and where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture. HRS 711-1107 Desecration (b) A place of worship or burial (2) "Desecrate" means defacing, damaging, polluting, or otherwise physically mistreating in a way that defendant knows will outrage the sensibilities of persons likely to observe or discover the defendant's action. Therefore Applicant in all due respect should not build and destroy what is still beautiful.

agencies is to preserve, protect, and prevent interference with the traditional and customary rights of native Hawaiians. Article XII, Section 7 requires the State to "protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by *ahupua'a* tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778" (2000). In spite of the establishment of the foreign concept of private ownership and western-style government, Kamehameha III (Kauikoaouli) preserved the peoples traditional right to subsistence. As a result in 1850, the Hawaiian Government confirmed the traditional access rights to native Hawaiian *ahupua'a* tenants to gather specific natural resources for customary uses from undeveloped private property and waterways under the Hawaiian Revised Statutes (HRS) 7-1. In 1992, the State of Hawai'i Supreme Court,

reaffirmed HRS 7-1 and expanded it to include, "native Hawaiian rights...may extend beyond the *ahupua'a* in which a native Hawaiian resides where such rights have been customarily and traditionally exercised in this manner" (Pele Defense Fund v. Paty, 73 Haw.578, 1992).

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...there is a need to clarify that the preparation of environmental assessments or environmental impact statement should identify and address effects on Hawaii's culture, and traditional and customary rights...[H.B. NO. 2895]

Act 16, enacted by the Legislature of the State of Hawaii (2020) with S.B. No. 2060

Section 3; (2) Historic resources;

(A) Protect, preserve, and where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

HRS 711-1107 Desecration

(b) A place of worship or burial

(2) "Desecrate" means defacing, damaging, polluting, or otherwise physically mistreating in a way that defendant knows will outrage the sensibilities of persons likely to observe or discover the defendant's action.

Therefore Applicant in all due respect should not build and destroy what is still beautiful.

Mahalo,

\_\_\_\_\_  
/s/  
Cindy Freitas

## Carol and Scott FULLER

Please be aware that more hotel development is not needed nor wanted in Keauhou Bay....please be more responsive to the community ....as it is the bay is over run with activities that destroy geography and vibe of a once pleasant place for all....NO to another non essential hotel...

## Barbara Garcia

Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. I was just there a few days ago and saw where it would be. This small bay does not need a new 105 room resort, there is already too many people and traffic. Bringing even more people to this small area will add to too big of a burden on the land and bay.

We are trusting that you will listen to your na'au and do what is pono to protect Keauhou Bay and its surroundings.

Mahalo nui

## Barbara Garcia

Aloha to all concerned, Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. I was just there a few days ago and saw where it would be. This small bay does not need a new 105 room resort, there is already too many people and traffic. Bringing even more people to this small area will add to too big of a burden on the land and bay. This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced. We are trusting that you will listen to your na'au and do what is pono to protect Keauhou Bay and its surroundings.

## Booey Hodgins Garcia

Growing up on Keauhou Bay was one of the happiest times of my life. I believe the portion of our property that the house was built on was actually a he'e'au. If this is true, I see nothing in your plans for this. Also, I feel your plan is cramming so much activity around the bay that it will lose whatever charm is left of it. The bay used to be alive with a ama, wana, coral and a lot of fish and other waterlife. Now it looks like an underwater desert with dusty sediment and nothing of the glorious sea life that thrived. Your plans are over the top and doing nothing but exploiting a beautiful bay for the sake of more money. Not so much for expressing Hawai'iana as it should be ~ beautifully. Your plan looks to me like it will be more of an eyesore with added traffic to a relatively peaceful area. Auwe 💎

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**From:** Barbara Garcia <[REDACTED]>  
**Sent:** Wednesday, August 7, 2024 5:20 PM  
**To:** 221053-01 KS; Keauhou Entitlements; Alex.Roy@hawaiicounty.gov; planning@hawaiicounty.gov; Keauhoubay@ksbe.edu  
**Subject:** Encouragement for No More Development around Keauhou Bay  
**Categories:** Yellow Category

Aloha to all concerned,

Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. I was just there a few days ago and saw where it would be. This small bay does not need a new 105 room resort, there is already too many people and traffic. Bringing even more people to this small area will add to too big of a burden on the land and bay.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

We are trusting that you will listen to your nāau and do what is pono to protect Keauhou Bay and its surroundings.

Mahalo nui,  
Barbara Garcia

## Kimberly Gay

I have been running a free volleyball league at Keauhou Bay for almost 40 years, consisting of 120 local youth members. These kids will have nowhere to go to play volleyball if this resort is built there.





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**From:** Kimberly Gay <[REDACTED]>  
**Sent:** Saturday, July 6, 2024 4:01 PM  
**To:** 221053-01 KS Keahou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keahoubay@ksbe.edu  
**Subject:** Attention Keahou Bay EIS Comment Letter

To whom it may concern,

Please, read the scientific proof below and state in your report that this Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT in Keahou Bay as stated in all the different reported articles below.

Please see the following article that states "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Even with storm drains if you allow this development it WILL POLLUTE Keahou Bay because as the above article (that was written in 2014 because runoff water from developments were polluting the ocean even then) states, and this is bay holds many sea creatures such as sea turtles, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals that have rested on the dock before and...

Keahou Bay is DOCUMENTED RESTING AREA for the ENDANGERED MONK SEAL, and if a resort is allowed to be built, that will bring a lot more people down to Keahou Bay and if a monk seal is resting they most likely will disturb the monk seal with their selfies because it is fully known this is now a SELFIE CULTURE.

This information is by NOAA Scientist, "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media.

There's a seal on the beach! Let's go get a 'sealfie!' That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

Has there been a detailed traffic study for the increase in cars that will be added to this already severely traffic area?

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

If you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years and, "Noise Pollution

Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behaviour of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from

Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations>.

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project, because it is scientifically proven that developments will ALWAYS have rain runoff that will pollute nearby waters constantly during development and after.

Please, read the Scientific articles below written by NOAA, National Oceanic and Atmospheric Administration and other professional organizations, that prove that developments have ALWAYS polluted the water in every coastal development area.

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all Aquatic Life there, and even the Manta Rays that go there to eat zooplankton from the Manta Ray tours at night, and they eat it during the day in that area as well because they need to eat 5 times their body weight in zooplankton daily. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

If you allow this bay to be development you will be allowing all types of marine life to die and there is NO WAY to stop this from happening because polluted runoff rain water from developments can't be fully stopped. It is what has happened in ALL coastal developments.

Please read the Scientific proof below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii: Across the Hawaiian Archipelago, coral

bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide...

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off). "<https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event>;  
<http://hawaii#:~:text=Coral%20Bleaching%20is%20Occurring%20more,had%20catastrophic%20impacts%20state%20wide>.

This article is by the Coral Reef Alliance here in Hawaii. "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawaii%20reefs%20face%20major%20global,into%20Hawaii%20BBi's%20waterways%20every%20day>.

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019...

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269066>

The Chesapeake Bay has a foundation that is trying to save it due to runoff pollution that was caused by developments, and the Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed because this bay is very small.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow...

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay because it is so much smaller than the Chesapeake Bay.

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water..." (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

The manta rays go to Keauhou Bay every night to eat zooplankton and if you allow this development that WILL have runoff water, you WILL be causing zooplankton to be seriously affected because as this article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that proves runoff from development in this area will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl- $\alpha$  concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

"Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question

important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

Here is a research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation." [https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3\\_6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3_6_chapter12_257-274.pdf)

The above articles show that development of Keauhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this could cause the manta ray food source to disappear and that will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on the manta ray tour for their income.

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will forsure bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regards to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C>

<https://www.abcnews.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C>

If you allow this resort to be developed, you will be destroying the coral reefs in the bay because this bay is extremely small and used by a lot of locals already for fishing, canoeing, swimming, snorkeling, paddle boarding, surfing, boating...it can't afford more use by many thousands more people yearly.

If you allow Keauhou Bay to be development there will be a higher population in the bay and that will hurt the coral in the bay as well, because it's known that, "Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with metapopulation theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science

Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation

management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaJhJqAnWAq453tRqN0jAiwel9inR3ZoTv0PYGzA5lc\\_H0QJzcHNIP3ASnhcgkRy6\\_vkLPw49dbrmBYoX5g3YIMgOjGBZsabdGUH17OJLSLbu9x5P73xED4KxI4T0sJlvgQ1a7ZZRt3rUbraxp0dJd2A0nISmW5uxB7JJEddpJ18OGJpx7ITJWdCFXFKJ1ZYeNdcJ3Sw\\_dnaUg5fZhcjPBImmmaHf5yqIT5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaJhJqAnWAq453tRqN0jAiwel9inR3ZoTv0PYGzA5lc_H0QJzcHNIP3ASnhcgkRy6_vkLPw49dbrmBYoX5g3YIMgOjGBZsabdGUH17OJLSLbu9x5P73xED4KxI4T0sJlvgQ1a7ZZRt3rUbraxp0dJd2A0nISmW5uxB7JJEddpJ18OGJpx7ITJWdCFXFKJ1ZYeNdcJ3Sw_dnaUg5fZhcjPBImmmaHf5yqIT5Q%3D&tracking_referrer=abcnews.go.com)

A Resort Development WILL Increase Traffic on Already Severly Trafficed Roads

The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side.

Allowing another resort to be developed will bring more cars that will lead to a lot more traffic that the island can not handle, please read the articles below by different NEWS companies that prove this point.

This NEWS article by Hawai'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Please watch their video on their link below because it is a professional report on Big Island traffic problems. <https://www.hawaii.newsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists comes more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state, This time last year Hawaii island was at five traffic deaths, as of April 1, 2024, they're at 14. Seven of which happened in the last two weeks..."

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is the same for Big Island. The traffic problems they talk about are the same issues here on Big Island, and this article also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

Please, watch the NEWS video from the link below on aerial footage in Hilo because the footage shown is the same thing that is happening on Alii Drive and Queen K HWY, and for the same reasons.

There are 2 developments already on Alii Dr. being built as of today, and more are scheduled for this road in the near future, and Alii Dr. and Queen K HWY are the roads Kamehameha Schools Bungalow Resort will be using if approved and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow already.

The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well.

See the photo below that proves this point in Kona, and here is the NEWS article by KITV NEWS that talks about Hilo and the same thing is happening in Kona on the roads Kamehameha Schools wants to develop their resort, "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash on Alii Dr. and when there is an accident on this road, it turns into only one lane that needs a flagger to help direction traffic. and that adds even more traffic to this already seriously congestion road, and Kamehameha Schools wants to add a resort on this road, and that will increase the traffic even more.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=-FQ5snPDjig>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Please read this Path article, HAWAII' COUNTY'S VISION ZERO INITIATIVE

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawai'i Island.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path as well as The Law of the Splintered Paddle below <https://bathhawaii.org/hawaii-countys-vision-zero-initiative/>

The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law, "Kōnōwai Mōmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless (especially kōpuna and keiki) across Hawai'i be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawaii. After being added back in 1978, the law is part of Hawaii's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

The Law of the Splintered Paddle is also on Kamehameha Schools website, so they should want to help make Big Island roads become safer and not add to the traffic and possible traffic death toll problem. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-199-200-years-after-k>

Besides a resort development in Keauhou Bay causing runoffs that will severely pollute the bay as the above research and science articles have shown above causing marine life to die, it will also increase in the bay's population that will seriously add to damaging even more coral, plankton and all marine life as well, and the island has severe traffic issues already with increased death tolls rising, and a resort development in Keauhou Bay will totally increase even more traffic in these already severely congested traffic areas.

The Big Island Doesn't Have the Resources and Infrastructure for Another Resort

Please see the articles below because the Big Island doesn't have the resources or infrastructure to safely add another resort development on island and these other NEWS and Research articles prove this point.

1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) "The overwhelming plastic waste Hawaii visitors leave behind By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A county commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill By Megan Moseley September 6, 2023 · 1:00 AM HST \* Updated September 6, 2023 · 2:02 PM

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only

working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 . 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawaii Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-CA%BBi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "BIG ISLAND NEWS HECO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 . 5:23 PM HST  
\* Updated February 14, 2024 . 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) "LOCAL NEWS

HECO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawika Uyehara, deputy director of Hawaii County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) U.S. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues  
By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "we're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) NewsHawaii'i County issues mandatory 25% water restriction for North Kona August 7, 2023 . 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawaii'i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video News on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii%CA%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

20) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/lbnuar3/hawaiian\\_electric\\_is\\_reporting\\_th\\_at\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/lbnuar3/hawaiian_electric_is_reporting_th_at_several_large/?rdt=52660)

21) "NewsHawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 . 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will damage Keauhou Bay coral and marine life and, Big Island resources and infrastructure are currently being negatively affected from the development that is on island already, and there are years of new development that have already been approved, before having safe resources and infrastructures for new developments.

With these scientifically proven articles by some of the most professional scientists in the world, they say the a serious population increase, as well as development and resort runoff that happens because of parking lots, and... with all coastal developments, it will be dangerous for Keauhou Bay to be development because it will damage the marine ecosystems in the area.

Please, save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools because all of these articles prove it would be extremely damaging to the waters at Keauhou Bay.

Thank you,

Sincerely,

Robert & Kimberly Gay

██████████  
██████████





## Amy Gillum

If Kamehameha Schools' goal is to "inspire" I can think of no worse way to do that than by taking a beautiful, quiet, historic bay and turn it into a resort area. I think the only thing to be gained by this misguided effort to develop the bay is to line the pockets of the very entity that is supposed to be stewards of the aina. It is so obvious that the plan would add traffic, congestion, people, pollution and trash in addition to taxing overburdened water treatment facilities. How can you truly call yourselves stewards? All of us that love and treasure Keauhou Bay see right through your ruse. The real reason for development? Profit.

Please do not move forward with this plan!

Amy Gillum

Kailua-Kona resident and user of Keauhou Bay

## Mesepa Gomes

This is not right I'm for restoring the land, and the history, and the culture and the heritage, it is not right that you guys say it's for the people and for the land when all I can see is a big outline that says resort, we do not need another resort we do not want another resort, you guys need to do better on the behalf of the Hawaiian people. They should be Hawaiian homes so Hawaiian don't have to keep moving away. I don't see how another resort is going to help the lamb or the ocean. All I see is money and greed in this project, but it doesn't matter what the people have to say you guys will do what you guys wanna do no matter what the Hawaiian people have to say and keep using Your power for money there is so much other things you guys can do with this land but yeah here's another resort. That's all I have to say. Do better Kamehameha schools

## Deborah Green

To whom it may concern, As a condo owner on Kamehameha III Road... I object to further development of Keaouhou Bay... for all the scientific reasons listed below and for the increased traffic (read pollution and quality of life) on Kam III, the further depletion of our limited water supply, and the poor infrastructure of our electrical grid... and the concern that there is not plan for a route should we have another tsunami. I fully support all the scientific reasons this is a terrible plan... and I can help being very anger about the potential destruction of an area that has been very Kama'aina friendly... watching the keiki run on the beaches, jump into the ocean and enjoy themselves... family picnics, canoeing... etc. This really takes a beautiful, wonderful and much enjoyed location away from those who love and treasure it... just for the sake of adding another tourist resort... NO! It's wrong.. greedy and destructive.. Please read the scientific proof in this letter and REJECT Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort. Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT in Keaouhou Bay as stated in all the different researched articles below. Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Shoals to develop their bungalow resort project, because it is scientifically proven that developments pollute nearby waters constantly during development and after. Please read these Scientific articles written by NOAA, National Oceanic and Atmospheric Administration and many other professional organizations, that have studied and proved that developments has ALWAYS polluted the water in every near coastal developed area. First, does this EIS have any kind of reports and studs on how the endangered species and marine life will handle the extra pollution due to development and golf course runoff because Keaouhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem. In the Endangered Species Act of 1973 Under Section 2 (b), "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay. The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list. The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/> "Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA) , as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/ENDANGERED SPECIES CONSERVATION Endangered Species Act> "Section 2. Findings, Purposes, and Policy (4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to— (b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section." This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-act> Keaouhou Bay IS the monk seals and the green sea turtle's habitat and to allow a bungalow resort to be developed in Keaouhou Bay, that is these endangered species habitat, is to threaten these

endangered species habit with golf course runoff pollution, as well as development pollution and hence, threaten their habitat, hence their lives, and goes completely against the Endangered Species Act of 1973. The words in the Endangered Species Act states, "to conserve" and conserving the endangered species that enter into Keaouhou Bay would be to NOT DEVELOP A BUNGALOW RESORT because this would cause serious pollution runoff that would pollute the bay and endanger these already endangered species, the green sea turtle and the monk seal. Sincerely and praying for some kuliama.... Deborah Green

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**From:** Debby Green <[REDACTED]>  
**Sent:** Friday, July 19, 2024 5:05 AM  
**To:** 221053-01 KS Keaouhou Entitlements; keaouhaubay@ksbe.edu  
**Cc:** AlexRoy@hawaiicounty.gov; Planning@hawaiicounty.gov  
**Subject:** The negative impact of development on Keaouhou Bay

**Categories:** Yellow Category

To whom it may concern,

As a condo owner on Kamehameha III Road... I object to further development of Keaouhou Bay...for all the scientific reasons listed below and for the increased traffic (read pollution and quality of life) on Kam III, the further depletion of our limited water supply, and the poor infrastructure of our electrical grid... and the concern that there is not plan for a route should we have another tsunami.

I fully support all the scientific reasons this is a terrible plan... and I can help being very anger about the potential destruction of an area that has been very Kama'aina friendly... watching the keiki run on the beaches, jump into the ocean and enjoy themselves... family picnics, canoeing... etc. This really takes a beautiful, wonderful and much enjoyed location away from those who love and treasure it...just for the sake of adding another tourist resort...NO! It's wrong.. greedy and destructive..

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First, does this EIS have any kind of reports and studs on how the endangered species and marine life will handle the extra pollution due to development and golf course runoff because Keaouhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.

In the Endangered Species Act of 1973 Under Section 2 (b), "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

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#### ENDANGERED SPECIES CONSERVATION

Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

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Keaouhou Bay IS the monk seals and the green sea turtle's habitat and to allow a bungalow resort to be developed in Keaouhou Bay, that is these endangered species habitat, is to threaten these endangered species habit with golf course runoff pollution, as well as development pollution and hence, threaten their habitat, hence their lives, and goes completely against the Endangered Species Act of 1973.

The words in the Endangered Species Act states, "to conserve" and conserving the endangered species that enter into Keaouhou Bay would be to NOT DEVELOP A BUNGALOW RESORT because this would cause serious pollution runoff that would pollute the bay and endanger these already endangered species, the green sea turtle and the monk seal.

Sincerely and praying for some kuliana....

Deborah Green

**Bryce Groark**

Aloha Kamehameha Schools.

I am a Keauhou resident.

Please see attached letter for my comments on the Keauhou Bay Management Plan (KBMP).

August 1, 2024

Jeannette Gurung

Dear Kamehameha Schools.

I am a Keaouhou Bay resident for 20 years, writing to express my deep concerns regarding the Kamehameha Schools (KS) Keaouhou Bay Management Plan (KBMP), specifically as it relates to the proposed priorities and their potential impacts on our local community and environment.

I believe that the current direction of the KBMP raises several significant issues that need to be addressed to better align with the community's needs and values.

- 1. History of Failed Stewardship:** KS has demonstrated a troubling lack of stewardship with the land already under its care in Keaouhou, evident from ongoing issues such as broken toilets, persistent water wastage, use of chemical poisons near the coastline for weeds, and totally inadequate management of homelessness and drug-related problems. Given this poor track record of stewardship, we have skepticism about KS's ability and care to effectively manage new developments while never addressing basic existing challenges.
- 2. Environmental Concerns:** The proposed development poses several environmental risks. Increased construction/roads and land use will lead to significant ecological disruption in the Keaouhou Bay area, which is already challenged. Ocean water quality is bad in and around the Keaouhou and He'eia Bay area due to poor land management practices. Increased issues with your development such as habitat destruction, increased runoff, and pollution will add even more detrimental effects on local wildlife and marine ecosystems.
- 3. Excessive Concrete and Pollution:** The expansion of concrete parking lots and other infrastructural elements will 100% lead to increased pollution and harm the environment. Building a retail center in Keaouhou Bay with all those parking spots is totally irresponsible - destroying nature for everyone so that KS can attempt to make a profit.
- 4. Infrastructure Strain:** Adding high-end vacation rentals and commercial spaces could strain local infrastructure, primarily the archaic sewage and waste management systems that are currently in place and perpetually challenged.
- 5. Previous Failures in Retail and Dining:** There is a historical precedent of failed retail and dining ventures in Keaouhou which suggests that similar developments most likely will not achieve the anticipated success.
- 6. Local Housing Needs:** The focus on high-end vacation rentals and other revenue-generating developments is exactly what the Keaouhou community does not need.

On behalf of my family of 5 who love, respect, play, and work to steward Keaouhou and He'eia Bays, I urge you to reconsider the current plan. We don't know one resident who thinks this is a good idea. We are all so scared as to how much this will ruin our community.

Aloha.



Bruce Groark



To whom it may concern,

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Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT in Keaouhou Bay as stated in all the different researched articles below.

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## [ENDANGERED SPECIES CONSERVATION](#)

Endangered Species Act

### "Section 2. Findings, Purposes, and Policy

**(4) the United States has pledged itself as a sovereign state in the international community to conserve** to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

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Keaouhou Bay IS the monk seals and the green sea turtle's habitat and to allow a bungalow resort to be developed in Keaouhou Bay, that is these endangered species habitat, is to threaten these endangered species habit with golf course runoff pollution, as well as development pollution and hence, threaten their habitat, hence their lives, and goes completely against the Endangered Species Act of 1973.

The words in the Endangered Species Act states, "to conserve" and conserving the endangered species that enter into Keaouhou Bay would be to NOT DEVELOP A BUNGALOW RESORT because this would cause serious pollution runoff that would pollute the bay and endanger these already endangered species, the green sea turtle and the monk seal.

**Does this EIS have any reports on the endangered species that frequent Keaouhou Bay because this is their habitat.**

**Under the Conservation Program there should be research done on endangered species and their associated ecosystems, which is Keaouhou Bay. Because this bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.**

**"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry**

**out programs for the conservation, management, and protection of such species and their associated ecosystems."** [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

**Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species."** [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please see that developing Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would happen a lot more often due to taking out the natural pollution filter, that is the trees and the land that is there now.

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely because of the bungalow resort development's pavement. As of right now the trees and land that this development wants to clear and develop into a bungalow resort is a Natural Pollution Filter.

Please read from **Wikipedia**, "**Most drains have a grating into a canal, river, lake, reservoir, sea or ocean. Other than catchbasins, typically there are no treatment facilities in the piping system.**" [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20drains%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20drains%20wells)

It's the pavement that this development wants to put in that will cause a lot of pollution to runoff into Keauhou Bay because this top land that is directly below the golf course (that they want to clear) soaks in the golf course pesticides, fertilizer, weed killer... and is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pollution.

Please see this site at <https://health.hawaii.gov/lepo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> because on page 2 it **states from the Hawaii government that Natural Ground Cover has 10% runoff, where has development has 55% runoff.**

**These trees and land** are saving monk seals and green sea turtles habitat from the golf course pollution and this land **MUST BE PRESERVED and CONSERVED** as the natural protector for Keauhou Bay hence, **for these endangered species habitat.**

**Under Section 2 (b) of the Endangered Species Act** - Keauhou Bay MUST BECOME a CONSERVATION AREA for these endangered species because it is their habitat as of today, and to allow a resort development to be built above this bay would threaten the very lives of these endangered species because it will allow golf course toxic pollution and development pollution to run into these species natural habitat, which is Keauhou Bay.

Keauhou Bay has trees and land just under the golf course (that Kamehameha Schools wants to clear for their bungalow resort) that protects Keauhou Bay from a lot of algae blooms because it soaks up pollution that is runoff from fertilizer, weed killer... in the golf course, and unfortunately when there is a severely heavy rain storm the land up on top of the bay has a greater runoff than normal from the golf course pollution, and pollution foam and algae blooms happen because of it.

If you clear this land, this kind of algae bloom will happen a lot more often and end up killing a lot of coral and marine life as stated in the many articles that will follow.

One of these articles is in the Global Coral Reef Alliance. They researched the reef before and after a golf course development, and even though this development is not a golf course development, it is still a development and it will also be located just under a golf course and this will allow the pollution from the golf course to come down to the bay a lot more often because the natural land that soaks up this pollution will be gone.

**Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?**

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development..The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution..

" <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-quana-cay-abaco-bahamas/>

if you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING KEAUHOU BAY'S ECOSYSTEM because the golf course runoff won't have the best protection which is the natural trees and land that can soak up the polluted water most of the year and polluted foam algae blooms will happen a lot more often.

Here is another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef

...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases.." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

**Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?**

This needs to be fully known because you will be changing an entire ecosystem to build a bungalow resort. Because it rains in Keauhou Bay many nights out of the year and the land they want to clear absorbs the golf course toxins so this bay is not as severely polluted as it will be with pavement and development, and when serious storms come Keauhou Bay won't stand a chance because the land can't keep ALL golf course pollutants out during this time and pavement won't even come close.

"if there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

**Federally Protected Green Sea Turtle Swim in Keauhou Bay Often**

The green sea turtle that is federally protected and can be seen in Keauhou Bay weekly. Please see the following article that states "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES

**Why does Hawaii have a runoff problem?**

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

if polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

if you allow this development it WILL POLLUTE Keauhou Bay as the above article (that was written in 2014 because runoff water from developments were polluting the ocean even then) states, and this bay holds many sea creatures such as the protected green sea turtle, spotted eagle rays, manna rays, octopus, dolphins, fish, coral, monk seals that have rested on the dock before and...that will ALL be harmed by the more severe pollution runoff that WILL happen because developments can't help but pollute the water nearby.

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL, and if a resort is allowed to be built, that will bring a lot more people down to Keauhou Bay and if a monk seal is resting they most likely will disturb the monk seal with their selfies because it is fully known this is now a SELFIE CULTURE.

**Has the EIS done any research on what a high population would do in such a small area, and what will happen to the endangered species that live there because it's their habitat and a high population will change this bay forever?**

This information is by NOAA Scientist. "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media.

There's a seal on the beach! Let's go get a 'sealifie!'" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In a [recent study](#), NOAA scientists used social media to monitor human activities around endangered [Hawaiian monk seals](#). They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

#### **Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?**

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, in Hilo, Puna, and there are Ocean View and Volcano housing construction projects as well. The entire Big Island has construction projects all over.

#### **Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?**

Because, "Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises.

Worldwide, hotels produce almost [300,000 tonnes of waste](#) each year." <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means these resources and infrastructures will be taxed even more in the near future.

Please read the below articles that prove that Big Island doesn't have the resources or infrastructure for a Bungalow Resort Development because it will increase the need for resources and infrastructure that the island doesn't have as of today.

#### **Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill**

September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years. (File photo)

Of the 900 total votes in our most recent poll, which asked people to weigh in on the best way to extend the life of the Big Island's [only remaining landfill](#), all of the above was the most popular answer, garnering 274 votes, or 30%.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

#### **A county commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill**

By [Megan Moseley](#) September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look

deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

### Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

### Drought Conditions On Hawai'i Island Prompt Water Supply Message

by Big Island Video News

on Oct 5, 2023 at 3:59 pm

**(BIVN)** – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information **from the U.S. Drought Monitor**. There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawaii%CA%BB-i-island-prompt-water-supply-message/>

### U.S.

**Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**

By [Li Cohen](#)

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to [significant droughts](#), and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the [world's largest surfing wave pool](#) opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. " ... We are on the verge of a greater catastrophe."

"We are in a [water crisis](#), that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawaii, told CBS News, saying that if the reasons for this crisis aren't soon addressed, **"We may come to a point where we have to decide ... who gets water and who doesn't."**

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island parts need to be shipped and the power plant has generators that are not working and because of this, and other reasons, the Big Island needs to seriously conserve power so that everyone will have power, and if this problem of shipping parts can happen once it can happen again.

#### UTILITIES

UPDATE: HECO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HECO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity use is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount

of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

#### Big power supply problems continue to plague Hawaii island

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

#### Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

### **What You Need To Know**

**-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity**

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

**Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?**

**Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? Because they will have employees with cars, guests with cars, visitors with cars and this would range at times at least over 200 cars or more, parking above Keauhou Bay causing serious car population because of all these added cars right next to the bay.**

Article below is from NOAA.

**What is the biggest source of pollution in the ocean?**

**Most ocean pollution begins on land.**

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or **construction sites can run off** into waterways, harming fish and wildlife

habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report  
Oil in the Sea: Inputs, Fates, and Effects

### **News Release September 28, 2022**

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a [new report](#) from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean

environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20D%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20says%20a%20new>

The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershepherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

**Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?**

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behaviour of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

## OCEANS POLLUTION

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

### **What is ocean noise?**

"Ocean noise refers to sounds made by human activities that can **interfere with or obscure** the ability of marine animals to **hear natural sounds in the ocean**."

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

**The Chesapeake Bay has a foundation that is trying to save it due to runoff pollution that was caused by developments, and the Chesapeake Bay is a lot bigger than Keauhou Bay.** If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed because this bay is very small.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...**runoff is a significant source of harmful nitrogen pollution that continues to grow...**

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

**Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.**

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20open%20areas.>

**If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay because it is so much smaller than the Chesapeake Bay.**

**Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?**

**Because the studies below show developments kill coral, marine life and zooplankton are kill and negatively affected as well, and zooplankton is the manta ray food. Manta rays are in this bay every night to eat zooplankton and sometimes they are in this bay during the day time too.**

If you allow this bay to be development you will be allowing all types of marine life to die and there is NO WAY to stop this from happening because polluted runoff rain water from developments can't be fully stopped. It is what has happened in ALL coastal developments.

Please read the Scientific proof below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA. "Coral Bleaching is occurring more frequently in Hawaii". Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic Impacts state-wide...

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban runoff). "<https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more, had%20catalytic%20impacts%20state%20wide.>

This article is by the Coral Reef Alliance here in Hawaii. "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." "<https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawaii%20reefs%20are%20major%20global,into%20Hawaii%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." "[https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is "We're driving change in research integrity and publication ethics." This is some of their article information. "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. **Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban runoff, may be exacerbated under high thermal stress.** In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." "<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all Aquatic Life there, and even the Manta Rays that go there to eat zooplankton from the Manta Ray tours at night, and they eat it during the day in that area as well because they need to eat 5 times their body weight in zooplankton daily. Please see the cited information below.

**"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.**

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates "<https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

**Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall**

**ecological function, and cause disease and mortality in sensitive species."**

<https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,service%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organism%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organism%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

The manta rays go to Keauhou Bay every night to eat zooplankton and if you allow this development that WILL have runoff water, you WILL be causing zooplankton to be seriously affected because as this article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle

environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem...

Here is another article that proves runoff from development in this area will hurt and kill plankton, by **Frontiers in Marine Science**, "**Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon**. The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl- $\alpha$  concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

"Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

Here is a research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "**Toxic Effects of Pollutants on Plankton**. There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants,

**transfer them to sediments and other organisms, and function in their biological transformation."** [https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

The above articles show that development of Keauhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this could cause the manta ray food source to disappear and that will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on the manta ray tour for their income.

**Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?**

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, **there likely be more than 6,300 people descending on Kona.**" <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

**Where are the EIS reports on human density because this resort will increase this area in population by hundreds. Below are reports that human population destroy coral reefs.**

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the **destruction of sensitive marine habitats** such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of **sediments** into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracts <https://oceantracts.org/librari/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will force bringing a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regards to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coa>

stal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%20a%20new%20study%20said>.

If you allow this resort to be developed, you will be destroying the coral reefs in the bay because this bay is extremely small and used by a lot of locals already for fishing, canoeing, swimming, snorkeling, paddle boarding, surfing, boating...it can't afford more use by many thousands more people yearly.

If you allow Keauhou Bay to be developed there will be a higher population in the bay and that will hurt the coral in the bay as well, because it's known that, "Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with metapopulation theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation>.

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii. Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaJhJqAnWAq453tRgN0jAWe9jnR3ZoTv0P](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaJhJqAnWAq453tRgN0jAWe9jnR3ZoTv0P)

[VGzA5Ic\\_H001zcHNIP3ASnhcgKRv6\\_vKLPw49dbmBYoX5q3YIMgQIGBZsabdCUH7OISLbu9x5P3xED4KxI4T0sJlvgQ1a7ZZRT3rUbraxpodJ2AoNISmWWSuxB7JIEDpJ8OGJpx71T3WdCfXFKJIZYeNdcJ3sw\\_dnaUg5IZlhcjPBDlmmaH15yqT5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.abcnews.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%20a%20new%20study%20said)

**A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads. Where are the traffic study reports for this EIS because with 150 rooms comes over 150 cars because you must include employee cars, as well as visitors for the people staying in the resort, and what if the guests have more than one car?**

The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side.

Allowing another resort to be developed will bring more cars that will lead to a lot more traffic that the island can not handle, please read the articles below by different NEWS companies that prove this point.

This NEWS article by Hawaii News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Please watch their video on their link below because it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists comes more accidents more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state. This time last year Hawaii island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks...

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he

added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is the same for Big Island. The traffic problems they talk about are the same issues here on Big Island, and this article also gives one Big Island example, "On the Big Island, the mayor had to issue [an emergency order](#) shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

Please, watch the NEWS video below on aerial footage in Hilo because the footage shown is the same thing that is happening on Alii Drive and Queen K HWY, and for the same reasons, all of these roads only have 2 lanes.

There are 2 developments already on Alii Dr. being built as of today, and more are scheduled for this road in the near future, and Alii Dr. and Queen K HWY are the roads Kamehameha Schools Bungalow Resort will be using if approved and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems, traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well.

See the photo below that proves this point in Kona, and here is the NEWS article by KITV NEWS that talks about Hilo and the same thing is happening in Kona on the roads Kamehameha Schools wants to develop their resort, "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash on Alii Dr. and when there is an accident on this road, it turns into only one lane that needs a flagger to help direct traffic. and that

adds even more traffic to this already seriously congestion road, and Kamehameha Schools wants to add a resort on this road that will increase the traffic by 100's of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=-FQ5snPDji8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Please read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawai'i Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path as well as The Law of the Splintered Paddle below <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

**The Law of the Splintered Paddle**

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law, "K?n?wai M?malahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless (especially k?puna and keiki) across Hawai'i be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, the law is part of Hawai'i's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

#### **The Law of the Splintered Paddle is also on Kamehameha Schools**

**website**, so they should want to help make Big Island roads become safer and not add to the traffic and possible traffic death toll problem. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

**Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious Resource and Infrastructure issues. Please read the articles below.**

#### **The Big Island Doesn't Have the Resources and Infrastructure for Another Resort**

Please see the articles below because the Big Island doesn't have the resources or infrastructure to safely add another resort development on island and these other NEWS and Research articles prove this point.

- 1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

- 2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25

years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

- 3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) "The overwhelming plastic waste Hawaii visitors leave behind By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A county commission drafts ordinance aiming to ban recyclables at West Hawaii landfill By Megan Moseley September 6, 2023 · 1:00 AM HST \* Updated September 6, 2023 · 2:02 PM

Hawaii's County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawaii Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealahou sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "BIG ISLAND NEWS HECO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday,

Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024. 5:23 PM HST  
\* Updated February 14, 2024. 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) "LOCAL NEWS

HECO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii | Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawika Uyehara, deputy director of Hawaii's County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) U.S. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues  
By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "we're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) NewsHawaii County issues mandatory 25% water restriction for North Kona  
August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawaii Water Supply Closely Monitored As Severe Drought Continues by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawaii, the Hawaii County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca-bbi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to their homes to help with power issues on the island.

20) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/Bigisland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reportng\\_that\\_several\\_large\\_rdrdt=52660](https://www.reddit.com/r/Bigisland/comments/1bnuar3/hawaiian_electric_is_reportng_that_several_large_rdrdt=52660)

21) "NewsHawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will damage Keauhou Bay coral and marine life and, Big Island resources and infrastructure are currently being negatively affected from the development that is on island already, and there are years of new development that have already been approved, before having safe resources and infrastructures for new developments.

With these scientifically proven articles by some of the most professional scientists in the world, they say the a serious population increase, as well as development and resort runoff that happens because of parking lots, and... with all coastal developments, it will be dangerous for Keauhou Bay to be development because it will damage the marine ecosystems in the area.

**Please, save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools because all of these articles prove it would be extremely damaging to the waters at Keauhou Bay.**

Thank you,

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**From:** Jenna Hancock <[REDACTED]>  
**Sent:** Wednesday, July 31, 2024 1:44 AM  
**To:** 221053-01 KS Keauhou Entitlements  
**Subject:** Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT

**Categories:** Yellow Category

To Whom It May Concern,

Please read the scientific proof in this letter and **REJECT** Kamehameha Schools Environment Impact Statement (EIS) for Keauhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a **SERIOUS NEGATIVE IMPACT** on Keauhou Bay as stated in all the different researched articles below.

Please, **DO NOT** risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have **ALWAYS** polluted the water in **EVERY** coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keauhou Bay is their habitat and this development **WILL** be **CHANGING** an Entire Ecosystem.

**ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT**

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keauhou Bay.

The Green Sea Turtle swims in Keauhou Bay weekly and the monk seal has also been seen swimming and resting in Keauhou Bay. Both of these marine animals are on the endangered species list.

Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/conservation/endangered-species-conservation/endangered-species-ac>

#### FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED

The green sea turtle is federally protected and can be seen in Keauhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservi.ce.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Allowing this development WILL POLLUTE Keauhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keauhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

#### THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keauhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keauhou Bay will likely be changed forever.

This information is from a NOAA Scientist: "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keauhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keauhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keauhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrs/current/Vol0103\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol0103_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm).

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrs/current/Vol0103\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol0103_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project.

#### GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "[https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells)"

Most drains have a single large exit at their point of discharge (often covered by a [grating](#)) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system.

The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEE-7.15.14.pdf> where the Hawaii government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keauhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

#### ALGAE BLOOMS KILL CORAL AND MARINE LIFE

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution..

" <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef."

"... After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

FURTHERMORE: "If there are [toxic algal blooms](#), like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

#### ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a [new report](#) from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2022/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20sa ys%20a%20new>

#### The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwaterishighered.org.au/blog/the-impact-of-stormwater-car-emissions/>

#### NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation

Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

#### How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

#### LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow...

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak

into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

#### MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide...

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off). " <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event->

[hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,had%20catastrophic%20impacts%20state%20wide.](#)

This article is by the Coral Reef Alliance here in Hawaii". "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/wherewe-work/hawaiian-islands/#:~:text=Hawai%CA%BB%20reefs%20face%20major%20global,Intro%20Hawai%CA%BB%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, falling sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban runoff, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?doi=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral->

[pollution.html#:~:text=impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species.](#)

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0>

[0#:~:text=Coastal%20development%20and%20runoff%20lead,service%20that%20coral%20reefs%20provide.](#)

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keaouhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

#### HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keaouhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keaouhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denner%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs,

which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in *Nature Sustainability*. " [https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-](https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-20190828/)

[scientists/story?id=96308858&:text=The%20less%20people%20at%20a%20area%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who%20visit%20a%20new%20stud](https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-20190828/)

[y%20said.](https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-20190828/)

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct [https://www.science-direct.com/science/article/abs/pii/S0065288120300328#:~:text=Aquacultur](https://www.science-direct.com/science/article/abs/pii/S0065288120300328#:~:text=Aquacultur%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.)

[e%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.](https://www.science-direct.com/science/article/abs/pii/S0065288120300328#:~:text=Aquacultur%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.)

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgONhahjIAWAg453RgN0IAIWei9nR3oTlV0PvGzA5lc\\_H0O1zcHNIP3ASnhcgKRY6\\_vkLPw49dbmBYoX5g3Y1MgQIGBZsapidGUH7O1SLbu9x5Pr3xED4Kx4T0slyvQIa7ZRR3Ubraxpod42AoNISM5uxB7JfEDdplj8OGJpx71TWdCfXFKIZYeNdcJ3Sw\\_dnaUg5ZlhcjPBDImmaH115yqT5Q%3D&tracking\\_referrer=abcnews-go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgONhahjIAWAg453RgN0IAIWei9nR3oTlV0PvGzA5lc_H0O1zcHNIP3ASnhcgKRY6_vkLPw49dbmBYoX5g3Y1MgQIGBZsapidGUH7O1SLbu9x5Pr3xED4Kx4T0slyvQIa7ZRR3Ubraxpod42AoNISM5uxB7JfEDdplj8OGJpx71TWdCfXFKIZYeNdcJ3Sw_dnaUg5ZlhcjPBDImmaH115yqT5Q%3D&tracking_referrer=abcnews-go.com)

#### INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste each year." <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Kealahou Bay. On Hawaii's Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawaii's landfill

September 17, 2023

The West Hawaii's Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawaii's landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill>

A County commission drafts ordinance aiming to ban recyclables at West Hawaii's landfill

By [Megan Moseley](#), September 6, 2023

Hawaii's County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawaii's County Director of Environmental Management, told commissioners the West Hawaii's Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

Drought Conditions On Hawai'i Island Prompt Water Supply Message

by Big Island Video News  
on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information from the U.S. Drought Monitor. There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Kā ū.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawaii%CA%BBi-island-prompt-water-supply-message/>

[U.S.](#)

Hawaii is "on the verge of a greater catastrophe", locals say, as water crisis continues

By [Li Cohen](#)

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to [significant droughts](#), and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the [world's largest surfing wave pool](#) opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. " ... We are on the verge of a greater catastrophe."

"We are in a [water crisis](#), that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawai'i, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

UPDATE: HELCO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity use is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

Big power supply problems continue to plague Hawaii Island

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES

A Resort Development Will Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawaii'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state. This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: All of these roads only have two lanes!

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=EQSsnPDjI8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii's Island...

Here are some other statistics that are even more staggering:

- 28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees
- 13% of pedestrians hit at 20 mph actually suffer fatality
- 73% of pedestrians hit at 40 mph suffer fatality
- 25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!
- 56% of fatal crashes were the result of alcohol or drugs
- 41% of fatal crashes occurred in light trucks and vans
- 49% of crashes occur during the day, outside of peak traffic hours
- Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

**MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC and WASTEWATER:**

- 1) Hawaii Deals with Burgeoning Waste Management Problem  
As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020  
“Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.” <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>
- 2) “Big Island Now readers seem to agree that there’s likely no single solution for slowing down the timeline of the West Hawai’i Sanitary Landfill reaching capacity.  
The West Hawai’i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.” <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill>
- 3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste  
Hawai’i Public Radio Published January 9, 2020 at 5:00 AM HST  
“Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.  
For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona.” <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>
- 4) “What happens to Hawaii Island’s trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill  
The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support.” <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->  
By Natasha Bourlin Aug 24, 2023  
Hawaii saw more than 9 million visitors last year. Those tourists’ first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles,

- floaties and inner tubes for their trips.” <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>
- 6) “A County commission drafts ordinance aiming to ban recyclables at West Hawai’i landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM  
Hawai’i County’s Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island’s only working landfill.” <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill>
  - 7) “Hawai’i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST  
A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.” <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>
  - 8) “Hawai’i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY  
HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions.” <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/>
  - 9) “Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealaheke  
sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024  
Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona.” <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>
  - 10) “Researchers find sewage from an oceanfront Big Island community reaches nearshore waters  
Hawai’i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST  
There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawai’i Department of Health.” <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>
  - 11) “Kona coast faces stark wastewater tradeoffs, Current situation  
There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) HELCO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawika Uyebara, deputy director of Hawaii County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the

island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) News Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawaii Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawaii, the Hawaii County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BB%BI-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/Bigisland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/Bigisland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/?rdt=52660)

20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

#### HISTORICAL AND CULTURAL SIGNIFICANCE:

The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, the law is part of Hawai'i's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

The Law of the Splintered Paddle is also on Kamehameha Schools website. The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.

#### IN CONCLUSION

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keauhou Bay and "The Endangered Species Act of 1973 (ESA or "The Act"; 16 U.S.C. § 1531 [et seq.](#)) is the primary law in the United States for protecting and conserving imperiled species. Designed to protect critically imperiled species from [extinction](#) as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President [Richard Nixon](#) on December 28, 1973. The [Supreme Court of the United States](#) described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation". [1] [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other. This land MUST be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come.

In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved. These issues MUST be solved before considering another resort development on Big Island.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is NOT suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen.

Please save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.

Mahalo,

Ivy Jenna Hancock





I am no expert, but I can see that the Kona Coast is already overpopulated, and we are befouling our nest. Kahalu'u Bay is already being polluted by leakage from nearby cesspools since the sewer line only extends as far as the EPA mandate; I have not heard that the Keaouhu development project involves an extension of that sewer. In any case, runoff from the acres of pavement in the new development will pollute Keaouhu Bay. What is more, fresh water supplies are not guaranteed in this dry region, so one wonders how existing wells will handle an increase in demand. Regarding traffic (and evacuation safety), Ali'i Drive is already completely impassable at several times during the day. How can the area support another such influx of population? And how does this plan for luxury dwellings correspond to the need for affordable housing in the area?

I'm really perplexed as to why KSBE needs to generate additional revenues now from the development of that prime piece of real estate above Keaouhu Bay. A 1995 *Wall Street Journal* article describes the Bishop Estate as "the nation's wealthiest charity," with an endowment estimated at \$10 billion. This is apparently greater than the combined endowments of Harvard and Yale universities. How can KSBE possibly need the revenue from this destructive and short-sighted development to fund its cultural projects?

Kamehameha Schools is rightly famous for its faithful stewardship of the historical sites at Kahalu'u Manowai and elsewhere. Their proposal to develop the open lands above Keaouhu Bay seems contradictory to the philosophy represented by that stewardship. Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keaouhu Bay to become a Bungalow Resort. Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keaouhu Bay as stated in all the different researched articles below. Please, DO NOT risk polluting the water in Keaouhu Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is **scientifically proven** that developments pollute nearby waters both **during and after development**.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have **ALWAYS** polluted the water in **EVERY** coastal development area. Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhu Bay is their habitat and this development **WILL be CHANGING an Entire Ecosystem**.

**ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT**

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhu Bay.

The Green Sea Turtle swims in Keaouhu Bay weekly and the monk seal has also been seen swimming and resting in Keaouhu Bay. Both of these marine animals are on the endangered species list.

**Endangered Species Act**

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—  
(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-act>

**Species-act**

**FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED**

The green sea turtle is federally protected and can be seen in Keaouhu Bay weekly.

The following article that states: **"POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"**

**Why does Hawaii have a runoff problem?**

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less

**From:** keaouhubay <keaouhubay@ksbe.edu>  
**Sent:** Monday, August 12, 2024 9:30 AM  
**To:** Michael Hanly  
**Subject:** Re: [EXTERNAL] Kamehameha Schools EIS Draft For Keaouhu Bay WILL HAVE NEGATIVE IMPACT

**Categories:** Yellow Category

Aloha e Michael,

Thank you for your comments concerning the Keaouhu Bay Management Plan, Draft Environmental Impact Statement. Your comments have been received and administratively recorded.

Comments received during the 45-day public comment period will be reproduced in the Final Environmental Impact Statement, and substantive comments addressed.

Since you also provided a copy to the County of Hawai'i and our planning consultant, G70, we will not be forwarding them a duplicate copy.

We appreciate your involvement and contribution to the environmental review process. Your input is invaluable in helping us develop a management plan that reflects the needs and concerns of our community.

Thank you once again for your engagement and commitment to the future of Keaouhu Bay.

Mahalo,

The Keaouhu Bay Project Team

**From:** Michael Hanly <[REDACTED]>  
**Sent:** Wednesday, August 7, 2024 4:20 PM  
**To:** keaouhubay@g70.design <keaouhubay@g70.design>; Alex.Roy@hawaiicounty.gov <Alex.Roy@hawaiicounty.gov>; Planning@hawaiicounty.gov <Planning@hawaiicounty.gov>; keaouhubay <keaouhubay@ksbe.edu>  
**Subject:** [EXTERNAL] Kamehameha Schools EIS Draft For Keaouhu Bay WILL HAVE NEGATIVE IMPACT

**CAUTION: This email is from an outside sender. Do not click on links or open attachments unless you recognize the sender and know the content is safe.**

Aloha to you all:

I write today to voice my opposition to the proposed development of land above Keaouhu Bay by the Kamehameha Schools to develop the land on the bluff above Keaouhu Bay and build 150 Resort-style bungalows. A groundswell of opposition has arisen to this move. Like many Kona residents, my wife and I are alarmed by what we've read

dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles. "Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/> **Allowing this development WILL POLLUTE Keauhou Bay.** The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keauhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawaii are protected by the Endangered Species Act (ESA) and additionally protected by [Hawaii Revised Statutes Chapter 195D \(HRS\)](#) and [Hawaii Administrative Rules \(HAR\) 13-124](#)." This information was taken from this site <https://dnr.hawaii.gov/dar/species/sea-turtles/>

**THE ENDANGERED MONK SEAL WILL BE AFFECTED**  
Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keauhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

**Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keauhou Bay will likely be changed forever.**  
This information is from a NOAA Scientist; "Study shows selfie culture impacts how people behave when posing images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie!'" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered [Hawaiian monk seals](#). They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-ony-four-over-selfies>  
NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the [Marine Mammal Protection Act \(MMPA\)](#), as well as locally by Hawaii Revised Statutes (HRS) [Chapter 195D](#) and Hawaii Administrative Rules (HAR) [13-124](#)." This was taken from <https://dnr.hawaii.gov/dar/hawaiian-monk-seal/>

**Keauhou Bay is the monk seals and the green sea turtle's habitat.** Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. **By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.**

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keauhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff

**Does this EIS have any reports on the endangered species that frequent Keauhou Bay? This is their habitat and it needs to be "conserved".**

Under the **Conservation Program** there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hscr/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hscr/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hscr/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hscr/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project.

**GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS**  
"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshiniegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable! Please read from Wikipedia."

Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20dr%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20dr%20wells)

The pavement from this development will cause pollution to runoff into Keauhou Bay because this tree land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEE-7.15.14.pdf> where the Hawaii government states that Natural Ground Cover has 10% runoff, where has

development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keauhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species' natural habitat of Keauhou Bay.

**ALGAE BLOOMS KILL CORAL AND MARINE LIFE**  
The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

**Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.**

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course development. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

**Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?**

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution. . . " <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keaouhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAHOUBAY'S ECOSYSTEM. Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef."

...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases. " <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef/>

**Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?**

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keaouhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

**FURTHERMORE:** "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservation.org/blog/2023/03/31/what-sea-foam/>

#### ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

**Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keaouhou Bay?**

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keaouhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keaouhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

**The article below is from NOAA regarding motor vehicle engines and pollution to the sea.**

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

**Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects**

News Release September 28, 2022

**WASHINGTON** — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a [new report](#) from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2022/09/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20Nearly%2085%20percent,pipeline%2C%20says%20a%20new>

**The Impact Of Stormwater – Car Emissions**

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershedherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

5

#### NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

**Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keaouhou Bay during development?**

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

**How Does Noise Pollution Harm Marine Species?**

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dair/in-marine-managed-areas/hawaii-marine-life-conservation-districts#:~:text=Sportfishing%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

**What is ocean noise?**

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

**LEARN FROM OTHERS:**

#### RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keaouhou Bay, if it's being drastically hurt by runoff water from developments, Keaouhou Bay waters won't stand a chance if development above the bay is allowed. Keaouhou Bay is a much smaller ecosystem.

**This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."**

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

6

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20leopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

### **MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN**

**Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?**

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

#### **It's Been Proven Developments Severely Pollute Nearby Waters**

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide..."

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban runoff)." <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event>

<https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event>

**This article is by the Coral Reef Alliance here in Hawaii!** "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawaii%CA%BB%20reefs%20face%20major%20global,info%20Hawaii%CA%BB%20wate%20wavs%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and

development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)  
This is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information. "**Coral taxonomy and local stressors drive**

**bleaching prevalence across the Hawaiian Archipelago in 2019...**

**We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian**

**Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors,**

**such as tourism and urban runoff, may be exacerbated under high thermal stress.** In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in

Hawaii!" <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawai'i had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

**"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.**

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

**Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species."** <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%20based%20sources,an%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother

coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project) **And among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival**" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,info%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,info%20the%20atmosphere%20within%20days.)

**It's Been Proven Resort Developments Kill Marine Life**

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like

**phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change.** Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon. The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. **This occurred in a relatively short time considering that the experiment lasted less than three weeks.** The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

**The ecosystem is fragile and interconnected as is stated in this article:** "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is

how toxins and pollution will affect this crucial link in the food chain". This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#~:text=Zooplankton%20are%20also%20sensitive%20to,light%20%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, **"Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage.** Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.doe.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.doe.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keahou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

#### **HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH**

**Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?**

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spoilright-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: **The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life.**" <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

**Where are the EIS reports on human density? Below are reports that show human population on destroys coral reefs.**

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution."

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development/#~:text=E-Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keahou Bay. **Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it.** Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas-hawaii-marine-life-conservation.>

districts/#~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.">https://www.marinebio.org/creatures/zooplankton/#~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.

#### **It's Been Proven an Increase in Human Population Destroys Coral Reefs**

If a Bungalow Resort is allowed to be built in Keahou Bay, it will bring a serious increase in human traffic. **"Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs.** Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#~:text=Denser%20coastal%20populations%20and%20greater%20more%20runoff%20and%20salination.>

This article is by ABC NEWS, **"This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found.** The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian Islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=963308858#~:text=The%20less%20people%20at%20a,there%20are%20the%20resear,ech%20found.&text=The%20millions%20of%20tourists%20who,world%20%20a%20new%20study%20said.> By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

#### **"Denser coastal populations and greater wealth will lead to reef degradation by coastal**

**construction.** Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from: Science

Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#~:text=Aquaculture%20will%20drive%20some%20shoring,0%20runoff%20and%20salination.>

Another article by Nature Sustainability, **"Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity.** By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, **coral reefs both attract and suffer from coastal tourism.** Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.pdf?sharding\\_token=wsakQNhahJhJANwAc4531RqN0IAWl9mR3Z01V0PyGzA5lc\\_H0012zhNfP3ASnhqoKRv6\\_VkLPw49dbmBYoXs93Y1MgQlGBZsapidGUH7O1SLbu9x5P3xED4Kx4T0sJlvGQ1a7zRz3arUbraxpooJq2AoNlSmmWsuXb7JlEDdpJ8OGJbpX71JWwG7XvFKJlZyENdcJf3Sw\\_dnaUg5lZheJPBDlmmah15vqT5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.pdf?sharding_token=wsakQNhahJhJANwAc4531RqN0IAWl9mR3Z01V0PyGzA5lc_H0012zhNfP3ASnhqoKRv6_VkLPw49dbmBYoXs93Y1MgQlGBZsapidGUH7O1SLbu9x5P3xED4Kx4T0sJlvGQ1a7zRz3arUbraxpooJq2AoNlSmmWsuXb7JlEDdpJ8OGJbpX71JWwG7XvFKJlZyENdcJf3Sw_dnaUg5lZheJPBDlmmah15vqT5Q%3D&tracking_referrer=abcnews.go.com)

#### **INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND**

**STRUGGLING FOR ANSWERS**

**Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?**

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

**Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the**

**Resources and Infrastructures for their resort development?**

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. **Worldwide, hotels produce almost 300,000 tonnes of waste each year.**" <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keahou Bay. On Hawaii Island, we are already struggling to meet the increasing need for resources and infrastructure.

**Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill**

September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

**A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill**

By Mecan Moseley September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of

Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

**Time's Up For Landfills**

"Gentle" demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

**Drought Conditions On Hawai'i Island Prompt Water Supply Message**

By Big Island Video News

on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information from the [U.S. Drought Monitor](#). There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'i.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

**From a Water Supply news release:**

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawaii%CA%BBi-island-prompt-water-supply-message/>

[U.S.](#)

**Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to [significant droughts](#), and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the [world's largest surfing wave pool](#) opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe."

**"We are in a water crisis, that has to be made very clear,"** Wayne Tanaka, director of Sierra Club of Hawai'i, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

**UPDATE: HELCO asks for continued energy conservation**

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawai'i Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity us is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

**Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawai'i Island because of the unavailability of several generators and lower than normal wind and solar resources.**

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/hcco-customers-on-hawaii-island-asked-to-conserve-power/>

**Big power supply problems continue to plague Hawai'i Island**

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

**The company explained that it faces an "extremely tight" supply of power at peak use periods.** especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plaque-hawaii-island>

**Hawaii Island customers urged to reduce electricity use through April**

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

**-If there is not enough electricity to meet demand,** Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumblocalnews.com/hilo/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

**FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES**

**A Resort Development Will Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?**

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawaii's News Now, "Report shows alarming surge in Hawaii Island traffic deaths. The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch

the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "**Hawaii Island has most traffic fatalities in state.** This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

**"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here,"** he added. <https://www.khon2.com/local-news/7-traffic-fatalities-are-hawaii-island-in-march/>

**The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.**

<https://www.khon2.com/local-news/7-traffic-fatalities-are-hawaii-island-in-march/>

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-iams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: **All of these roads only have two lanes!** There are two developments already on Alii Drive being built as of today, and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalov Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-iams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-iams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FQSnPDjI8>

**Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.**

**Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:**

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

**"That's just Big Island traffic,"** is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

**MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING**

**WATER, TRASH, ELECTRIC and WASTEWATER:**

**1) Hawaii Deals with Burgeoning Waste Management Problem**

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

**2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawaii Sanitary Landfill reaching capacity."**

The West Hawaii Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://biainlandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

<https://biainlandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

- 3) **Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste**  
 Hawaii Public Radio Published January 9, 2020 at 5:00 AM HST  
 "Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.  
 For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>
- 4) **What happens to Hawaii Island's trash and recyclables?** BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill  
 The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->
- 5) **"The overwhelming plastic waste Hawaii visitors leave behind**  
 By Natasha Bourlin Aug 24, 2023  
 Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>
- 6) **"A County commission drafts ordinance aiming to ban recyclables at West Hawaii landfill** By Megan Moseley September 6, 2023 · 1:00 AM HST  
 \* Updated September 6, 2023 · 2:02 PM  
 Hawaii County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>
- 7) **"Hawaii County issues mandatory 25% water restriction** for North Kona August 7, 2023 · 5:21 PM HST  
 A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>
- 8) **"Hawaii Water Supply Closely Monitored As Severe Drought** Continues by Big Island Video News on Nov 6, 2023 at 3:28 pm STORY SUMMARY  
 HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai-ca%BBi-under-severe-drought/>
- 9) **"Big Island Concerns About Water Quality** Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe  
 sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024  
 Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>
- 10) **"Researchers find sewage from an oceanfront Big Island community reaches nearshore waters** Hawaii Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST  
 There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>
- 11) **"Kona coast faces stark wastewater tradeoffs**, Current situation  
 There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-start-wastewater-tradeoffs/>

- We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.
- 12) **"HELCO restores power after initiating emergency outages** on Big Island by: Elizabeth 'Uji Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST  
 An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>
- 13) **Hawaii State News Update: Hawaiian Electric initiates rolling outages** throughout Big Island February 13, 2024 · 5:23 PM HST  
 \* Updated February 14, 2024 · 4:21 PM  
 The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>
- 14) **HELCO issues rolling power outages around Big Island** by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST  
 Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>
- 15) **"Here's how power outages can have repercussions** for Hawaii's water supply Hawaii Public Radio | By Savannah Harriman-Pote  
 Published February 13, 2024 at 10:59 AM HST  
 Water departments on Oahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month.  
 But what does the power grid have to do with the water supply?  
 It is impossible to separate Hawaii's power system from its water system, said Kawika Uyebara, deputy director of Hawaii County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>
- 16) **US Hawaii is "on the verge of a greater catastrophe**," locals say, as water crisis continues  
 By Li Cohen  
 Updated on: April 11, 2024 / 8:23 AM EDT / CBS News  
 In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says. "We're in deep trouble."  
<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>
- 17) **News Hawaii County issues mandatory 25% water restriction** for North Kona  
 August 7, 2023 · 5:21 PM HS  
 A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend.  
<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>
- 18) **Hawaii Water Supply Closely Monitored As Severe Drought** Continues  
 by Big Island Video News  
 on Nov 6, 2023 at 3:28 pm  
 (BIVN) – With an ongoing drought on the island of Hawaii, the Hawaii County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.  
<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai-ca%BBi-under-severe-drought/>  
 This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>  
 Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.
- 19) **"Hawaiian Electric is reporting that several large generators** on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/?rdt=52660)

**20** **"Hawaiian Electric asking Big Island customers to conserve power due to down generators**  
March 25, 2024 · 11:49 AM HST  
According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

### **HISTORICAL AND CULTURAL SIGNIFICANCE:**

#### **The Law of the Splintered Paddle**

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a device, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unarmed. The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawaii. After being added back in 1978, **the law is part of Hawaii's State Constitution today.**

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

**"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."**

**The Law of the Splintered Paddle is also on Kamehameha Schools website.** The historical value of this law should be enough to help make Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-rmg-true-200-years-after-k>

**Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.**

### **IN CONCLUSION**

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keaouhou Bay and "The Endangered Species Act of 1973 (ESA) or "The Act"; 16 U.S.C. § 1531 [et seq.](#) is the primary law in the United States for protecting and conserving imperiled species. Designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President [Richard Nixon](#) on December 28, 1973. The Supreme Court of the United States described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation" [\[1\]](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973) [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keaouhou Bay on the other. This land MUST be conserved in order to keep Keaouhou Bay safe for all the marine life to be able to live there for years to come. In addition to the natural disaster this will cause, Hawaii Island is already having serious infrastructure and resource issues that have yet to be solved. These issues MUST be solved before considering another resort development on Big Island. We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keaouhou Bay, the birthplace of King Kamehameha III. Keaouhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is NOT suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen.

Please save Keaouhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.

Please reject this EIS because Kamehameha Schools has NOT ACKNOWLEDGED OR ASKED thousands of Hawaiians, or Hawaiian Descendants from Keaouhou Bay how they feel about developing this land. Keaouhou Bay.

They have asked ONLY a few families on an island that has thousands of Hawaiians and her and her mother OPPOSE DEVELOPMENT! <https://vimeo.com/994680462>

Kupuna Kumu Lily Kong who was born in Keaouhou Bay and she states that she is against development. She also states that her mother was against development as well. Please listen to her words in her testimonial video about Keaouhou Bay on this link and know that this proves that descendant directly from Keaouhou Bay OPPOSE THIS DEVELOPMENT <https://vimeo.com/994680462> and it is CULTURAL LAW THEY MUST BE HEARD AND ACKNOWLEDGED!

These laws were created. After these legal victories, the Kohanaki 'Ohana worked to create a new law in the state of Hawaii to require Cultural Impact Statements along with Environmental Impact Statements for all future large-scale development. Act 50, the Cultural Impact Statement Law was adopted in 2000. " <https://kohanakiohiana.org/legal-victories>

Kupuna Kumu Lily Kong also states that there are burial grounds on the land that Kamehameha Schools wants to clear and it is told that Kamehameha Schools has bulldozed sacred land in the past and Keaouhou Bay's burial grounds MUST BE RESPECTED AND NOT DISTURBED!

Hawaiians locals have said that there were bones in the small cave that is at the base of Keaouhou Bay. These burials need to take priority over a Bungalow Resort Development.

There are over 6,219 signatures as of Aug. 5th (these signatures grow daily) and these signatures are Hawaiians, locals and tourist and some of these Hawaiians have left comments on why they are opposing this development.

ALL OF THESE PEOPLE HAVE A RIGHT TO BE ACKNOWLEDGED AND THEIR VOICES HAVE VALUE TO BE HEARD, THESE PEOPLE MATTER AND IT IS CULTURAL LAW THEY MUST BE ACKNOWLEDGED! Here is the petition link with thousands of Hawaiian signatures and comments opposing Kamehameha Schools Bungalow Resort Development. Please read these signatures and comments! [https://www.change.org/p/save-keaouhou-bay-from-becoming-a-big-crowded-resort?utm\\_source=share\\_petition&utm\\_medium=custom\\_url&recruited\\_by\\_id=922a53560-1e91-1-1e5-b4ef-b94e90cedb0d](https://www.change.org/p/save-keaouhou-bay-from-becoming-a-big-crowded-resort?utm_source=share_petition&utm_medium=custom_url&recruited_by_id=922a53560-1e91-1-1e5-b4ef-b94e90cedb0d)

Please reject this EIS because under Princess Bernice Pauahi Bishop's Will it states Kamehameha Schools are her trustees and they have a "fiduciary duty" to do what is best for THEIR BENEFICIARIES (the Hawaiian people's) and a Bungalow Resort is BEST FOR TOURISTS NOT THE HAWAIIAN PEOPLE BECAUSE THOUSANDS OF HAWAIIAN PEOPLE SINGED THE ABOVE PETITION OPPOSING KAMEAHMEHA SCHOOLS BUNGALOW RESORT.

Please reject this EIS because the Big Island DOES NOT HAVE THE RESOURCES TO PROVIDE FOR ANOTHER BIG RESORT ON ISLAND and there are 445 signatures with many comments that agree with this fact because of the factual reported articles in the [Help Prioritize Big Island Developments to Keep Island's Resources Safe for ALL petition](#). Please read this petition, all the signatures and

**comments** <https://www.change.org/p/help-prioritize-big-island-developments-to-keep-island-s-resources-safe-for-all>

My wife and I add our voices to those of our neighbors in opposing this move.

Respectfully yours,

Michael and Ines Hanly



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## Antu Harvey

Please Do Not exploit Keauhou 'āina to extract money. Any more development in that culturally sacred and environmentally fragile and unique place will destroy its remaining qualities. Stop turning the Kona coast into another Kohala coastal resort area or another Waikiki.

We live here full-time. We are being pushed out by all this commercial development to the sole benefit of investors and tourists. We want to save this, one of the few remaining places where we can see and feel connected to our heritage, so our keiki and future generations can see and feel connected to it and at be at peace.

I am the Executive Director of Pūlama iā Kona Heritage Council and live in the village of Hōlualoa, very near where the Kealakowa'a road and several hōlua were still visible until mostly bulldozed during the past 75 years. It breaks my heart that the Keauhou hōlua was bulldozed for a golf course. Please stop before all is obliterated, leaving only a few photos and interpretive signs.

Others have researched and have shared the severe adverse Environmental, Public Safety and Infrastructure impact concerns.

We are at a tipping point. It is time we must slow down this destruction of our unique and precious remaining landscapes. Please suspend this project or better yet, reimagine your kuleana regarding its protection and highest use for the health and survival of our 'āina.

Mahalo for your time and consideration.

~Antu

**From:** Adele Henkel <[REDACTED]>  
**Sent:** Tuesday, August 6, 2024 9:06 PM  
**To:** alex.roy@hawaiicounty.gov; 221053-01 KS Keauhou Entitlements; planning@hawaiicounty.gov; keaouhoubay@ksbe.edu  
**Subject:** Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT!

**Categories:** Yellow Category

To whom it may concern,

Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a serious negative impact in Keauhou Bay

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff."

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," shares that the golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are being held off from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endanger these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,

Adele Henkel  
Kailua Kona, Hawaii

**From:** Adele Henkel <[REDACTED]>  
**Sent:** Tuesday, August 6, 2024 9:06 PM  
**To:** alex.roy@hawaiicounty.gov; 221053-01 KS Keauhou Entitlements; planning@hawaiicounty.gov; keaouhoubay@ksbe.edu  
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Kind Regards,

Adele Henkel  
Kailua Kona, Hawaii

## Michael Herbert

Aloha,

My name is Michael Herbert. Please see attached:

- (1) Written comments: Keauhou Bay Conceptual Plan Response Aug 5 2024
- (2) Royal Holua Cultural Park map.jpg
- (3) Brief video explaining proposed Holua Cultural Park: [https://youtu.be/3B\\_MiBFyMcE](https://youtu.be/3B_MiBFyMcE)



Group 70 International, Inc. dba G70

111 S. King Street, Suite 170

Honolulu, Hawaii'i 96813

Attn: Kawika McKeague, Principal Planner

Email: [Keaauhobay@g70.design](mailto:Keaauhobay@g70.design)

Fax: (808) 523-5866

August 6, 2024

Aloha,

My name is Michael Herbert and I live in the Keaauhoo makai area with my wife and our two children. I have reviewed the Keaauhoo Bay Conceptual Plan. This is my second time submitting and sharing ideas I have about Keaauhoo Bay development plans.

I am disappointed that the restoration of the Holua was not included in your plan. To respond, I've hand drawn a 3.5 foot by 6.5 foot map for a Holua Cultural Park that I can envision (jpeg file attached).

I also made a brief video to clearly explain the Holua Cultural Park map.

Here is a link to my video: [https://youtu.be/3B\\_MiBFYMcE](https://youtu.be/3B_MiBFYMcE)

My wife and I have owned a home in Keaauhoo since 2004. We were married at the Keaauhoo hotel (when it was the Sheraton) in 2009. We are raising our two young children here in Keaauhoo, and our family benefits daily from the many special features of this place.

I have reviewed the Keaauhoo Bay Conceptual Plan. I am pleased that commercial development is being confined to the cliff top (proposed resort area) and south end of the bay. The inclusion of the Heritage Center, restoration of anchialine ponds and foot pathways by the Mo'ikeha cave are excellent. The proposed additions of quality picnic & grill areas to the north end of the Bay will be enjoyed by locals and visitors. Seeing the Keaauhoo Canoe Club incorporated into the plan was also a relief.

However, I have two specific areas of concern:

**1. Restore and rebuild the holua (North).**

We often walk with our children, neighbors, and visitors and point out to them the magnificent Royal Holua. I cannot help but imagine the intense speeds attained descending the slide and admire the bravery of those who participated in the sport. Equally impressive is the amount of resources and social coordination needed by the Hawaiian community here at Keaauhoo to build the hole.

The Royal Holua should be restored as completely as possible, and should once again be a place for people to practice the sport and for spectators to enjoy it. The proposed redevelopment of this area presents a once-in-a-generation opportunity to make bold moves to reclaim this magnificent feature and revive traditions surrounding holua sled racing. Keaauhoo Bay could become the epicenter for the revival of the Holua. I urge KS to take advantage of the opportunity and act more fully on the vision to restore this area by bringing back the Royal Holua.

I have a clear concept for a Holua Cultural Park. I attached a picture of a hand-drawn map and have made a short video explaining the map. Here again is a link to my brief Holua Cultural Park video: [https://youtu.be/3B\\_MiBFYMcE](https://youtu.be/3B_MiBFYMcE)

**2. DO NOT make the Old Kona Road a thoroughfare.**

Land use on the north end of Keaauhoo Bay should focus on the physical and cultural revival of the Holua. Do not use Old Kona Road as a connector between Kamehameha III Road and Kaliaopapa Road, as this would abolish all hopes of restoring the Holua. Extend Old Kona Road from its joint with Kaliaopapa on the south side of the bay and pave just as far as is needed to serve the resort development above the cliffs and no farther.

**Security**

Opening the Old Kona Road to connect the north end of the Bay to the proposed resort could introduce security concerns for your guests. We live down here in the condos off Kamehameha III Rd. At night, some of the people who meet up in the dark north end of the bay are unstable. My family usually avoids the area after dark. Connecting Old Kona Road as a primary entrance to your resort's main parking lot would grant anyone easy access and diminish the security of your property.

Keep your Resort property physically cut off from the north end of the bay. I suggest simply creating a turnaround in your resort parking lot that loops into a section of Old Kona road. In addition, if the Holua is restored, another strong and beautiful physical barrier would be created that offers even greater separation. The Holua would cleanly break away the proposed resort from the day use grill and picnic areas in the North. I'm sure your guests will enjoy the added security and seclusion that this plan offers.

**Traffic Safety**

If opened, the Old Kona Road would pass right next to the proposed picnic and grill areas. Children will likely be running around and playing in the area. Vehicle traffic to the proposed resort including visitors, employees, and delivery trucks would be passing by the picnic areas constantly. This is unsafe.

The current plan does not properly balance residents' safety and enjoyment of the proposed added picnic areas with visitors' resort access. Access to the resort should only be allowed via Kaliaopapa Street, where all other Keaauhoo Bay commercial and resort activity is currently concentrated.

**Resort Access/Traffic Light**

I understand easy resort access for your guests may be a priority, but don't take this too far. Limit vehicular resort access to the intersection of Old Kona Road and Kaliaopapa Street. At this new paved intersection, install a traffic light that is triggered by pressure plates on Old Kona Road's stop line. A pressure-plate controlled stop light will manage traffic at the intersection of Old Kona Road, Kaliaopapa Street and Ehukai Street, which would serve the Outrigger Resort, Keaauhoo Pier, as well as the proposed Keaauhoo Bay front retail and cliff top resort.

Many visitors have moved beyond the mindset when resorts nodes were developed to exclude local culture; visitors seek enriching experiences that, while comfortable, allow an opportunity to learn about and celebrate local, and especially indigenous culture. The new development should reflect that evolution in the visitor industry. KS has truly remarkable resources and the ability to realize an inclusive, restorative, and transformative vision for this place.

I strongly urge you to reconsider you plan and restore the Royal Holua. It was already overrun and abandoned once before. Second chances don't come often. If you proceed as planned, the Holua will be lost.

I would be happy to talk further with KS about any of these ideas. I plan to stay in this area and want to help make it the best it can be for present and future generations. The land and waters of Keaauhoo Bay have a powerful story to tell; let the story be told.

Thank you,

Michael Herbert





**From:** david hill <[REDACTED]>  
**Sent:** Friday, July 26, 2024 12:46 PM  
**To:** 221053-01 KS; Keaouhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keaouhoubay@ksbe.edu  
**Subject:** Proposed Keaouhou Bay Bungalow Resort  
**Categories:** Yellow Category

Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keaouhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is **scientifically proven** that developments pollute nearby waters both **during and after development**.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have **ALWAYS** polluted the water in **EVERY** coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development **WILL be CHANGING an Entire Ecosystem**.

#### **ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT**

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

#### **Endangered Species Act**

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

#### **FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED**

The green sea turtle is federally protected and can be seen in Keaouhou Bay weekly.

The following article that states: "**POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES**"

#### **Why does Hawaii have a runoff problem?**

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

**Allowing this development WILL POLLUTE Keaouhou Bay.** The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keaouhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen **because developments have been shown to ALWAYS pollute the water is that is nearby.**

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawaii are protected by the [Endangered Species Act \(ESA\)](#) and additionally protected by [Hawaii's](#)

[Revised Statutes Chapter 195D \(HRS\)](#) and [Hawaii Administrative Rules \(HAR\) 13-124](#). This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>.

### THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keaouhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keaouhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

**Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keaouhou Bay will likely be changed forever.**

This information is from a NOAA Scientist; **"Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie!'"** That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a [recent study](#), NOAA scientists used social media to monitor human activities around endangered [Hawaiian monk seals](#). They discovered that human disturbance is more common than they thought. "<https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the [Marine Mammal Protection Act \(MMPA\)](#), as well as locally by Hawai'i Revised Statutes (HRS) [Chapter 195D](#) and Hawai'i Administrative Rules (HAR) [13-124](#)." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

**Keaouhou Bay is the monk seal's and the green sea turtle's habitat.** Allowing a bungalow resort to be developed in Keaouhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. **By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.**

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to **protect the land around Keaouhou Bay** from developments that destroy the habitat of these endangered species with pollution and runoff.

**Does this EIS have any reports on the endangered species that frequent Keaouhou Bay? This is their habitat and it needs to be "conserved".**

Under the **Conservation Program** there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hircurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hircurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hircurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hircurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keaouhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keaouhou Bay and the surrounding area during the building phase of this enormous project.

### GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses [approximately 50 pesticide active ingredients](#), including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keaouhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "  
Most drains have a single large exit at their point of discharge (often covered by a [grating](#)) into a [canal](#), river, lake, [reservoir](#), sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where **the Hawai'i government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keauhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.**

**These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitats.**

Under Section 2 (b) of the Endangered Species Act - **Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species.** It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

#### **ALGAE BLOOMS KILL CORAL AND MARINE LIFE**

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

**Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.**

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Through this development is

not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

**Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?**

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Cuana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution... " <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-cuana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

**Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?**

This needs to be fully assessed because **you will be changing an entire ecosystem** to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

**FURTHERMORE:** "If there are [toxic algal blooms](#), like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

## ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

**Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?**

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

**The article below is from NOAA regarding motor vehicle engines and pollution to the sea.**

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

**Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects**

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a [new report](#) from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20says%20a%20new>

## The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwaterfisherherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

## NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

**Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?**

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

## How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

### **What is ocean noise?**

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred

habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

### **LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS**

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is **a lot bigger** than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

**This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states,** "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and

other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

### **MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN**

**Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?**

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

### **It's Been Proven Developments Severely Pollute Nearby Waters**

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide..."

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban runoff)." <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event>:

[hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,had%20catastrophic%20impacts%20state%20wide.](https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event)

**This article is by the Coral Reef Alliance here in Hawaii:** "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/wwhere-we-work/hawaiian-islands/#~:text=Hawaii%20reefs%20face%20major%20global,into%20Hawaii%20waterways%20every%20day>.

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "**Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019...**

**We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress.** In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

**"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.**

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

**Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species."** <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%20based%20sources,and%20mortality%20in%20sensitive%20species>.

Article by Environmental Evidence, "**Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide.**" <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0>  
[https://oceanservice.noaa.gov/education/tutorials/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals](https://oceanservice.noaa.gov/education/tutorials/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals).

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. **Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.**

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorials/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals](https://oceanservice.noaa.gov/education/tutorials/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals).

Another article by NOAA, "**Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)**

**Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival"** [https://oceanservice.noaa.gov/education/tutorials/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days](https://oceanservice.noaa.gov/education/tutorials/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days).

**It's Been Proven Resort Developments KILL Marine Life**

This article by MarinBIO states, "**Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change.** Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. **This occurred in a relatively short time considering that the experiment lasted less than three weeks.** The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

**The ecosystem is fragile and interconnected as is stated in this article:** "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creates/zooplankton/#:~:text=Zooplankton%20MarineBIO.,https://www.marinebio.org/creates/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, **"Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage.** Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

## HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

13

## Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: **The overwhelming majority (97%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life.**" <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

## Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean

Tracks [https://oceantracks.org/library/human-impacts/coastal-](https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20i)

[development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.](https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.)

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. **Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it.** Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of

14

future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dair/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

### **It's Been Proven an Increase in Human Population Destroys Coral Reefs**

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. **"Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs.** Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, **"This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found.** The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20study%20said.>

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

**"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction.** Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, **"Coral reefs and coastal tourism in Hawaii Coral reefs are popular** for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, **coral reefs both attract and suffer from coastal tourism.** Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaJhJjAAnWAq453tRgN0AJWle9JinR3ZoTv0PyGzA5Ic\\_H0O1zcHNIP3ASnHcgKRY6\\_vKLpW49qbrmBYoX5g3YIMgOIGBZsabdGUHI701SLbu9X5Pr3xED4KXl4TosJlvgQ1a7ZRR3rUbraxpod1d2AonISmWSuxB7JIEDdpJ8OGJpX7TJTWdCfXvFKJIZYeNdcJj3Sw\\_dnaUg5iZlhcjPBDimmaH15vgT5O%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaJhJjAAnWAq453tRgN0AJWle9JinR3ZoTv0PyGzA5Ic_H0O1zcHNIP3ASnHcgKRY6_vKLpW49qbrmBYoX5g3YIMgOIGBZsabdGUHI701SLbu9X5Pr3xED4KXl4TosJlvgQ1a7ZRR3rUbraxpod1d2AonISmWSuxB7JIEDdpJ8OGJpX7TJTWdCfXvFKJIZYeNdcJj3Sw_dnaUg5iZlhcjPBDimmaH15vgT5O%3D&tracking_referrer=abcnews.go.com)

### **INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS**

#### **Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?**

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

#### **Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?**

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. **Worldwide, hotels produce almost 300,000 tonnes of waste each year.**" <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keauhou Bay. On Hawaii Island, we are already struggling to meet the increasing need for resources and infrastructure.

#### **Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill**

September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

### **A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill**

By [Megan Moseley](#), September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

### **Time's Up For Landfills**

17

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

### **Drought Conditions On Hawai'i Island Prompt Water Supply Message**

by Big Island Video News  
on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information from the [U.S. Drought Monitor](#). There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

### **From a Water Supply news release:**

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawai%CA%BBi-island-prompt-water-supply-message/>

[U.S.](#)

18

## Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By [Li Cohen](#)

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to [significant droughts](#), and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the [world's largest surfing wave pool](#) opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. " ... We are on the verge of a greater catastrophe."

**"We are in a water crisis, that has to be made very clear,"** Wayne Tanaka, director of Sierra Club of Hawaii, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

### UPDATE: HELCO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity us is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure

that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

### Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

### Big power supply problems continue to plague Hawaii Island

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

**The company explained that it faces an "extremely tight" supply of power at peak use periods,** especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "**Hawaii Island has most traffic fatalities in state.**" This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

**"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here,"** he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

**The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.**

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue [an emergency order](#) shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: **All of these roads only have two lanes!**

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation,

## Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

**-If there is not enough electricity to meet demand,** Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

## FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES

**A Resort Development Will Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?**

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawaii News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a

Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html).

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FQ5snPDii8>

**Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.**

**Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:**

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii's Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

**"That's just Big Island traffic,"** is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

## **MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC AND WASTEWATER:**

### **1) Hawaii Deals with Burgeoning Waste Management Problem**

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

**2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawaii's Sanitary Landfill reaching capacity.**

The West Hawaii's Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

**3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges in Dealing With Its Waste** Hawaii's Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

**4) "What happens to Hawaii Island's trash and recyclables?"** BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables->

**5) "The overwhelming plastic waste Hawaii visitors leave behind**

By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

**6) "A County commission drafts ordinance aiming to ban recyclables at West Hawaii landfill"** By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawaii's County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

**7) "Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST**

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

**8) "Hawaii Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY**

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-casbbi-under-severe-drought/>

**9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealahehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024**

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

**10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST**

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

**11) "Kona coast faces stark wastewater tradeoffs, Current situation**

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

**12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth Uffi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST**

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

**13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST \* Updated February 14, 2024 · 4:21 PM**

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

**14) HELCO issues rolling power outages around Big Island** by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night."

<https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>  
**15) "Here's how power outages can have repercussions for Hawaii's water supply** Hawaii Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawika Uyehara, deputy director of Hawaii County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

**16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) News Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

**18) Hawaii Water Supply Closely Monitored As Severe Drought Continues**

by Big Island Video News on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawaii, the Hawaii County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-CA%BBB-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

**19) Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."**

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large\\_generators/](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large_generators/)

27

**20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators**

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

## HISTORICAL AND CULTURAL SIGNIFICANCE:

### The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawaii. After being added back in 1978, **the law is part of Hawaii's State Constitution today.**

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned

28

-Taking kuleana (responsibility) for those we serve

-Doing so with compassion, love, and respect

**“We take that to mean that anyone who uses our roadways should be able to do so without fear of harm,” explains Tina.”**

**The Law of the Splintered Paddle is also on Kamehameha Schools website.** The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

**Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.**

## IN CONCLUSION

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keauhou Bay and "The **Endangered Species Act of 1973 (ESA)** or "The Act"; 16 U.S.C. § 1531 [et seq.](#)) **is the primary law in the United States for protecting and conserving imperiled species.** Designed to protect critically imperiled species from [extinction](#) as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President [Richard Nixon](#) on December 28, 1973. The [Supreme Court of the United States](#) described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation".<sup>[1]</sup>" [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other. This land MUST be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come.

In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved. These issues MUST be solved before considering another resort development on Big Island.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is NOT suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen.

Please save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.

Mahalo,

David Hill, Captain Cook

## Theresa Holderread

I've read the management plan for Keauhou Bay. I'm trying to figure out how the development of that land, into a proposed bungalow resort, aligns with the plan or the vision of Kamehameha Schools? I can understand the cultural aspect of the proposal and if the plan was to build affordable housing for the community but that doesn't seem to be the case. Also, if the mission/vision of Kamehameha Schools is to protect/be good stewards of the aina, why expose Keauhou Bay to the potential pollution from groundwater runoff etc? Concerned citizen and resident of the Big Island, Theresa Holderread Kailua Kona

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**From:** keauhoubay <keauhoubay@ksbe.edu>  
**Sent:** Tuesday, July 30, 2024 4:43 PM  
**To:** Theresa Holderread  
**Cc:** 221053-01 KS Keauhou Entitlements; Alex.Roy@hawaiicounty.gov  
**Subject:** RE: [EXTERNAL] Keauhou Bay Management Plan  
**Categories:** Yellow Category

Aloha e Theresa -

Thank you for your comments concerning the Keauhou Bay Management Plan, Draft Environmental Impact Statement. Your comments have been received and administratively recorded.

Comments received during the 45-day public comment period will be reproduced in the Final Environmental Impact Statement, and substantive comments addressed.

The County of Hawai'i and our planning consultant, G70, are copied here on this email so that they receive a copy of your feedback.

We appreciate your involvement and contribution to the environmental review process. Your input is invaluable in helping us develop a management plan that reflects the needs and concerns of our community.

Thank you once again for your engagement and commitment to the future of Keauhou Bay.

Mahalo,

The Keauhou Bay Project Team

-----Original Message-----

**From:** Theresa Holderread <[REDACTED]>  
**Sent:** Monday, July 22, 2024 8:13 PM  
**To:** keauhoubay <keauhoubay@ksbe.edu>  
**Subject:** [EXTERNAL] Keauhou Bay Management Plan

I've read the management plan for Keauhou Bay. I'm trying to figure out how the development of that land, into a proposed bungalow resort, aligns with the plan or the vision of Kamehameha Schools?

I can understand the cultural aspect of the proposal and if the plan was to build affordable housing for the community but that doesn't seem to be the case. Also, if the mission/vision of Kamehameha Schools is to protect/be good stewards of the aina, why expose Keauhou Bay to the potential pollution from groundwater runoff etc?

Concerned citizen and resident of the Big Island, Theresa Holderread Kailua Kona This message is the property of Kamehameha Schools and any attachments are confidential to the intended recipient at the e-mail address to which it has been addressed. If you are not the intended recipient, you may not copy, forward, disclose or use any part of this message or its attachments. If you received this transmission in error please notify the sender immediately by e-mail or contact Kamehameha Schools at webmaster@ksbe.edu and then delete this message from your system.

## Michael Hooser

This will affect our ocean and the area negatively. Golf course run of and damaging of reefs are just a couple of the negative impacts. Kamehameha schools supposed to be here for the Hawaiian people. Why are you trying to accommodate more haoles coming to the island???? We need self sustainability not more tourism. Hawaiians have been trying to hammer this point across and you guys aren't listening. I have so little faith in so called Hawaiian organization's like yours claiming your here for the betterment of our lands and claiming to help the people. This is just greed at its ugliest. So many displaced kanaka and you guys are proposing this atrocity. Disgusting

## Myland Hui

NO!!! Perhaps upgrading the area for boats and trailers but NO to the development of the resort cottages. The impact to this pristine area would be devastating. Most disturbed would be the water quality and negative environmental impact to the wildlife in the bay from runoff. Really? Is this what our ancestors would have wanted?

## Trinidad Hunt

**From:** Trinidad Hunt <[REDACTED]>  
**Sent:** Saturday, July 13, 2024 2:25 PM  
**To:** 221053-01 KS Keaouhou Entitlements  
**Subject:** Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT!  
**Attachments:** Save K Bay.docx; PastedGraphic-3.tiff

**Categories:** Yellow Category

### To Whom it may concern,

Please read the scientific proof below and state in your report that this Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT in Keaouhou Bay, as stated in all the different reported articles below.

The Green Sea Turtle swims in Keaouhou Bay weekly, and the monk seal has also been seen there.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the [Endangered Species Act \(ESA\)](#) and additionally protected by [Hawaii Revised Statutes Chapter 195D \(HRS\)](#) and [Hawaii Administrative Rules \(HAR\) 13-124](#)." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

"Hawaiian monk seals are protected federally by the ESA and the [Marine Mammal Protection Act \(MMPA\)](#), as well as locally by Hawai'i Revised Statutes (HRS) [Chapter 195D](#) and Hawai'i Administrative Rules (HAR) [13-124](#)." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

### [ENDANGERED SPECIES CONSERVATION](#)

Endangered Species Act

### "Section 2. Findings, Purposes, and Policy

**(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—**

**(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be**

To whom it may concern, Please read the scientific proof below and state in your report that this Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT in Keaouhou Bay, as stated in all the different reported articles below. The Green Sea Turtle swims in Keaouhou Bay weekly, and the monk seal has also been seen there. The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/> "Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/ENDANGERED SPECIES CONSERVATION Endangered Species Act> " Section 2. Findings, Purposes, and Policy (4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to— (b) PURPOSES.— The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved , to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section." This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac> T he word in the very Endangered Species Act states, "to conserve", and conserving the endangered species that enter into Keaouhou Bay would be NOT to DEVELOP A BUNGALOW RESORT because this would cause serious runoff that would pollute the bay and endanger these already endangered species the green sea turtle and the monk seal. " § 195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." This was taken from [https://www.capitol.hawaii.gov/hir/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hir/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please, see that developing Kamehameha Schools Bungalow Resort in Keaouhou Bay would threaten endangered species due to the unavoidable pollution runoff that would happen a lot more often due to taking out the natural pollution filter, that is the trees and the land. I was born in Honolulu and moved from Oahu to Kona because Kona was still a remnant of old Hawaii. Have we not learned from our experience in Honolulu and Maui? Please, Kamehameha Schools, you have been entrusted as the protectors of these islands. Please don't sell out. "Ua Mau ke Ea i ka 'Aina i ka Pono" "The life of the land is perpetuated in righteousness." As by Patty Kealohalani Wright says: "In truth, every action in life is either Pono...or not. And humankind's assignment is to be Pono in all things." Pono is at the heart of our love of these islands. In the Spirit of Aloha, Dorothy, Trinidad Hunt With Much Aloha, Trinidad D, Trinidad Hunt President Eian Enterprises LLC Trinidad Hunt Publishing Group World Youth Network International



## Marcie Ide

Aloha All,

In the 1960's, I grew up on Keauhou Bay with my kapuna in a rental near where the Outrigger Kona Resort chapel is now located. Keauhou Bay is the source from where I come from.

I applaud most of the proposed development activities in the Keauhou Bay Management Plan to "reorient commercial activities away from culturally sensitive areas to alleviate congestion and establish a new place-based cultural educational center."

I support this opportunity to develop a scenic and open space heritage corridor that protects habitats, maintains biodiversity, and promotes outdoor recreation with trails, picnic tables and bathrooms.

· Restore the cultural landscape with physical features, trees, pathways, and pavilions, that express the historical significance of his birthplace.

· Restore the Old Kona Road and Keauhou Trail to provide access mainly for pedestrians, bicycles, the handicapped and parking.

I understand the need for Kamehameha Schools to optimize and invest in revenue opportunities that provide long-term economic returns. However, money isn't the most important issue here. Keauhou Bay and the nearshore waters are too small and fragile to support more development.

Keauhou Bay needs the protection and support of the existing natural filtering system between the golf course and the beach.

The bungalow development imposes a significant environmental impact, paving over this natural filtering system, by adding additional hardscape. It also defines what kinds of people and incomes can enjoy this development. It becomes a destination that works for fewer and fewer types of people.

The bungalow concept is symptomatic of over-tourism and lack of affordable housing. "People here need authentic, affordable workforce housing. The needs of this community do not include more hotel rooms." Rebecca Villegas, a Hawaii County Council member whose district includes Keauhou Bay.

The draft environmental impact study arguments are conclusory and underdeveloped. The potential impacts of the increased traffic, noise, marine water quality, and demand on the area's drinking water supply have yet to be analyzed.

Keauhou Bay is one of the last historically untouched areas on the island that has not been overdeveloped and enjoyed by locals and visitors for many decades. Once we lose this land to another development, we will never see it again.

Warmly,  
Marcie Ide

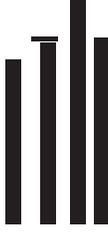


Wayfinding :

"Knowledge of where one is, is crucial if one is to profit from an experience."

Warmly,

Marcie Ide



Wayfinding :

“Knowledge of where one is, is crucial if one is to profit from an experience.”

---

**From:** Marcie Ide <[REDACTED]>  
**Sent:** Wednesday, August 7, 2024 3:04 PM  
**To:** 221053-01 KS Keaouhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keaouhoubay@ksbe.edu  
**Subject:** Kamehameha Schools Development Plan For Keaouhou Bay

**Categories:** Yellow Category

Aloha All,

In the 1960's, I grew up on Keaouhou Bay with my kapuna in a rental near where the Outrigger Kona Resort chapel is now located. Keaouhou Bay is the source from where I come from.

I applaud most of the proposed development activities in the Keaouhou Bay Management Plan to “reorient commercial activities away from culturally sensitive areas to alleviate congestion and establish a new place-based cultural educational center.”

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The bungalow concept is symptomatic of over-tourism and lack of affordable housing. “People here need a authentic, affordable workforce housing. The needs of this community do not include more hotel rooms.” Rebecca Villegas, a Hawaii County Council member whose district includes Keaouhou Bay.

The draft environmental impact study arguments are conclusory and underdeveloped. The potential impacts of the increased traffic, noise, marine water quality, and demand on the area's drinking water supply have yet to be analyzed.

Keaouhou Bay is one of the last historically untouched areas on the island that has not been overdeveloped and enjoyed by locals and visitors for many decades. Once we lose this land to another development, we will never see it again.

# Jeanne Isola

I cannot believe the KS is even considering plans to develop this small area and this tiny, beautiful bay that is the site of Kamehameha's birthplace. Every morning and evening, looking down at Keaouhou Bay, the phrase, 'Malama the aina' is the refrain that runs through my mind. With this outrageous proposal to develop this sacred land, KS threatens to fail to uphold the pledge to 'malama the aina.' I fervently hope that this devastating plan does not come to fruition.

Debra Javar

Note: Since the Kamehameha Research Comment Letter is Step 1 & 2 in HHS's Proposed Kamehameha Schools EIS Draft EIS, I have a Negative Impact in Keaouhou Bay. The letter has to come before the EIS is released. You are not allowed to comment on the EIS until after you have read it. I just copy the letter and send it, because I add more researched information to it on how a Bungalow Resort WILL HURT Keaouhou Bay for years to come. Copy and Paste this letter in the Step 1 & 2. Google search how to copy and paste from the device you have should you not know how. Malaha for your time! Comment Letter Below To whom it may concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have SERIOUS NEGATIVE IMPACT in Keaouhou Bay as stated in all the different researched articles below.

First, describe EIS how they find of species and studies on how the endangered species and marine life will handle the extra pollution due to development and golf course runoff because Keaouhou Bay is their habitat and this development WILL be changing an entire ecosystem.

In the Endangered Species Act of 1973 Under Section 2 (b), "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawaii are protected by the Endangered Species Act (ESA) and additionally protected by Hawaii Revised Statutes Chapter 195D (HRS) and Hawaii Administrative Rules (HAR) 13-124." This information was taken from the site <https://dlt.hawaii.gov/dar/species/sea-turtle/>

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### ENDANGERED SPECIES CONSERVATION

#### Endangered Species Act

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Keaouhou Bay IS the monk seals and the green sea turtles' habitat and to allow a bungalow resort to be developed in Keaouhou Bay, that is these endangered species habitat, is to threaten these endangered species habit with golf course runoff pollution, as well as development pollution and hence, threaten their habitat, hence their lives, and goes completely against the Endangered Species Act of 1973.

The words in the Endangered Species Act states, "to conserve" and conserving the endangered species that enter into Keaouhou Bay would be to NOT DEVELOP A BUNGALOW RESORT because this would cause serious pollution runoff that would pollute the bay and endanger these already endangered species, the green sea turtle and the monk seal.

Does this EIS have any reports on the endangered species in Keaouhou Bay because this is their habitat.

"195D-5. Conservation programs (a) The department shall conduct research on indigenous species, wildlife, and land plants, and on endangered species and their associated ecosystems, such as all other lands and waters, and other lands, water, and air, in order to determine their status and to determine appropriate management and protection of such species and their associated ecosystems." This was taken from [https://www.caip.hawaii.gov/legis/statutes/Vol03\\_C10012\\_42/0000HR\\_00150/00150\\_HRS\\_0195D-0005.htm](https://www.caip.hawaii.gov/legis/statutes/Vol03_C10012_42/0000HR_00150/00150_HRS_0195D-0005.htm)

Please see that developer's Kamehameha Schools Bungalow Resort in Keaouhou Bay would threaten endangered species due to the unavoidable development and golf course pollution runoff that would happen a lot more often due to taking out the natural pollution filter, that is the trees and the land that is there now.

"The golf industry uses approximately 50 pesticides active ingredients, including chlorpyrifos, insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to the height the mowers can more vulnerable to pests, which leads to more pesticides use." <https://www.golfcourse.com/news/pesticides/>

These pesticides will be in the pollution runoff that will enter Keaouhou Bay more severely because of the bungalow resort development pavement. As of right now the trees and land that this development wants to clear and develop into a bungalow resort is a Natural Pollution Filter.

Please read from Wikipedia. \*

Monk seals have a single large ear at their point of discharge (often covered by a grating) into a canal, over, lake, reservoir, sea or ocean. Other than canals, seals typically have no treatment facilities in the piping system. [https://en.wikipedia.org/wiki/Storm\\_drain#/media/File:Storm\\_drain\\_in\\_the\\_urban\\_environment.jpg](https://en.wikipedia.org/wiki/Storm_drain#/media/File:Storm_drain_in_the_urban_environment.jpg)

In the pavement that this development wants to put in that will cause a lot of pollution to runoff into Keaouhou Bay because this top land that is directly below the golf course (that they want to clear) soaks in the golf course pesticides, fertilizers, weed killer... and is the BEST ANIMAL PROTECTION POLLUTION FILTER Keaouhou Bay has from the golf course pollution.

Please see this site at <https://health.hawaii.gov/epa/files/2013/09/Stormwater-MS4-Pesticides-HF-7.13.14.pdf> because it states that the Hawai'i government that Natural Ground Cover has 100% runoff where has development has 5% runoff and that storm drains here in Hawai'i get untreated polluted runoff water into the ocean.

These trees and land are saving monk seals and green sea turtles' habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keaouhou Bay, hence for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keaouhou Bay MUST BECOME a CONSERVATION AREA for these endangered species because it is their habitat as of today, and to allow a resort development to be built above the bay would threaten the very lives of these endangered species because it will allow golf course toxic pollution and development pollution to run into these species natural habitat, which is Keaouhou Bay.

Keaouhou Bay has the trees and land just under the golf course (that Kamehameha Schools want to clear for their bungalow resort) that protects Keaouhou Bay from a lot of algae blooms because it soaks up pollution that is runoff from fertilizer, weed killer... in the golf course, and unfortunately when there is a severely heavy rain storm the land up on top of the bay has a greater runoff than normal from the golf course pollution, and pollution from algae blooms happen because of it.

If you clear this land, this kind of algae bloom will happen a lot more often and end up killing a lot of coral and marine life as stated in the many articles that will follow.

One of these articles is in the Global Coral Reef Alliance. They researched the reef before and after a golf course development and even though this development is not a golf course development, it is still a development and it will also be located just under a golf course and this will allow the pollution from the golf course to come down to the bay a lot more often because the natural land that soaks up this pollution will be gone.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guam, Oahu, Hawaii, Palau, and Tahiti"

Introduction: Bahamas coral reef deterioration

This study is through the first ever to evaluate the health of coral reef ecosystem and fisheries before and after a golf course development. The vast majority of corals have died from a combination of <https://www.globalwarming.org/golf-course-kill-coral-reef-and-fisheries-harmful-algae-blooms-and-diseases-caused-by-nutrient-runnoff-from-golf-course-development-on-gaunias-ay-ahoo-bahama/> and land that can soak up the polluted water most of this year and polluted foam algae blooms will happen a lot more often.

Here is another study by the Coral Reef Alliance titled, "Coral course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef"  
<https://www.globalwarming.org/golf-course-fertilizer-nutrient-enrichment-leads-to-harmful-algae-blooms-on-a-bahamian-coral-reef/>

"After construction new algae blooms appeared within the golf course greens, smothering corals in adjacent reefs, along with sharply increased coral diseases..."

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully known because you will be changing an entire ecosystem to build a bungalow resort. Because it rains in Keauhou Bay many nights out of the year and the land they want to clear will keep ALL golf course pollution out during this time and pavement won't even come close.

"If there are toxic dead blooms, like red tide, or toxic cyanobacteria, like paralytic shellfish poisons, in the water, when swimmers are splashed with the bubbles of sea foam, when those bubbles pop, the toxins can become airborne and compromise the air that is breathed in this location." <https://oceanstudies.org/blog/2023/03/31/what-are-dead-turtles>

Federally Protected Green Sea Turtles Swam in Keauhou Bay Often TURTLES

Why does Hawaii have so many dead turtles?  
Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the sun, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, the extra from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chicoreview.com/news/pollution/leakoff-to-hawaii-endangers-green-sea-turtles/>

Even with storm drains if you allow this development it WILL POLLUTE Keauhou Bay as the above article that was written in 2014 because runoff water from developments were polluting the ocean even then states, and this boy holds many sea creatures such as the protected green sea turtle, spotted eagle rays, mantle rays, octopus, dolphins, fish, coral, monk seals that have rested on the dock before and... and will ALL be harmed by the more severe pollution runoff that WILL happen because developments can't help but pollute the water nearby.

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL, and if a resort is allowed to be built, that will bring a lot more people down to Keauhou Bay and if a monk seal is resting they most likely will disturb the monk seal with their selfishness because it is fully known this is now a SHELTER CULTURE.

Has the EIS done any research on what a high population would do in such a small area, and what will happen to the endangered species that live there because it's their habitat and a high population will change this bay forever?

Because this information is by NOAA Scientist, "Study shows selfie culture impacts how people behave when posing images of an endangered species on social media. There's a seal on the beach left to get a selfie?" That must have been when nearly 18 percent of people on Instagram thought before approaching an endangered species. In a recent study, NOAA <https://www.fishbase.org/news-story/endangered-hawaiian-monk-seal-gets-600-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles inhabit can be a serious disturbance for these endangered species.

Has the EIS done any research or reports on the endangered species and the high population that this resort will bring in?

There are many big housing developments currently under construction in Keolu Kona, Waikoloa Village, in Hilo, Puna, and there are Ocean View and Volcano housing construction projects as well. The entire Big Island has constructive projects all over.

Has Keauhou beach EIS done any kind of reports or surveys about how Big Island Resources will provide for their resort? Because as of now, Island Resources and Infrastructure are having serious negative issues and many developments are not even completed as of yet.

**From:** Susie J. <[ksbe@hawaiicounty.gov](mailto:ksbe@hawaiicounty.gov)>  
**Sent:** Monday, July 29, 2024 2:41 PM  
**To:** 221053-01 KS Keauhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keauhoubay@ksbe.edu  
**Subject:** Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT!

**Categories:** Green Category  
**Subject:** Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT!

To whom it may concern,  
Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keauhou Bay.

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, *National Oceanic and Atmospheric Administration*, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called *nonpoint source pollution, which occurs as a result of runoff.*"

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos — an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endanger these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,

C.S. Jenkins

Laura Johnson

Please see the attached letter. Thank you for your consideration.

To whom it may concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT in Keaouhou Bay as stated in all the different researched articles below.

First, does this EIS have any kind of report or study on how the endangered species and marine life will handle the extra pollution due to this development? Keaouhou Bay is their habitat and this development WILL be changing an entire ecosystem.

**In the Endangered Species Act of 1973 Under Section 2 (b), "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved," This would be Keaouhou Bay.**

The Green Sea turtle swims in Keaouhou Bay and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list. Monk Seals are considered extremely endangered.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by [Hawai'i Revised Statutes Chapter 195D \(HRS\)](#) and [Hawai'i Administrative Rules \(HAR\) 13-124](#)." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

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#### **ENDANGERED SPECIES CONSERVATION**

Endangered Species Act

"**Section 2. Findings, Purposes, and Policy**

**(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—**

**(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."** This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-act>

Keaouhou Bay IS the monk seal's and the green sea turtle's habitat and to allow a bungalow resort to be developed in Keaouhou Bay is to threaten that habitat with golf course runoff pollution, as well as development pollution and hence, threaten their lives, and goes completely against the Endangered Species Act of 1973.

The words in the Endangered Species Act states, "to conserve" and conserving the endangered species that enter into Keaouhou Bay would be to NOT DEVELOP A BUNGALOW RESORT because this would cause serious pollution runoff (taking out the natural pollution filter - trees and the land that is there now) that would pollute the bay and endanger these already endangered species. .

**Does this EIS have any reports on the endangered species in Keaouhou Bay because this is their habitat.**

"**§195D-5 Conservation programs.** (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." This was taken from [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Cho121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Cho121-0200D/HRS0195D/HRS_0195D-0005.htm).

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshingolf.com/pages/the-environmental-impact-of-golf-courses>

Please read from [Wikipedia](#),

**Most drains** have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system.

"[https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells)

More pavement and less trees/land will cause a lot of pollution to runoff into Keaouhou Bay because this top land that is directly below the golf course (that they want to clear) soaks in the golf course pesticides, fertilizer, weed killer... and is the BEST AND ONLY PROTECTION POLLUTION FILTER Keaouhou Bay has from the golf course pollution. More runoff promotes huge algae blooms which hurts these species, and also coral, fish and other ocean life.

Please see this site at <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> because it states from the Hawai'i government that **Natural Ground Cover has 10% runoff, where has development has 55% runoff.**

**Under Section 2 (b) of the Endangered Species Act** - Keaouhou Bay MUST BECOME a CONSERVATION AREA for these endangered species because it is currently their habitat and to allow a resort development to be built above this bay would threaten the lives of these endangered species because it will allow golf course toxic pollution and development pollution to run into these species' natural habitat.

**Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?**

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and

fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, and land-based sources of pollution.

" <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING KEAUHOU BAY'S ECOSYSTEM.

Here is another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef

...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

**Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?**

"If there are **toxic algal blooms**, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

**Federally Protected Green Sea Turtle Swim in Keauhou Bay Often**

The green sea turtle that is federally protected and can be seen frequently in Keauhou Bay. Please see the following article that states "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES

**Why does Hawaii have a runoff problem?**

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL, and if a resort is allowed to be built, that will bring a lot more people down to Keauhou Bay and if a monk seal is resting, they most likely will disturb the monk seal with their selfies because it is fully known this is now a SELFIE CULTURE.

Has the EIS done any research on what a high population would do in such a small area, and what will happen to the endangered species that live there because it's their habitat and a high population will change this bay forever?

This information is by NOAA Scientist, "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media.

There's a seal on the beach! Let's go get a 'selfie'!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In a [recent study](#), NOAA scientists used social media to monitor human activities around endangered [Hawaiian monk seals](#). They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high human population in monk seal and sea turtle habitat can be a serious disturbance for these endangered species.

**Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?**

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano as well. The entire Big Island has construction projects all over.

**Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?**

Because as of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means these resources and infrastructures will be taxed even more in the near future.

Please read the below articles that prove that Big Island doesn't have the resources or infrastructure for a Bungalow Resort Development because it will increase the need for resources and infrastructure that the island doesn't have as of today.

**Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill**

September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years. (File photo)

Of the 900 total votes in our most recent poll, which asked people to weigh in on the best way to extend the life of the Big Island's [only remaining landfill](#), all of the above was the most popular answer, garnering 274 votes, or 30%.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

**A county commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill**

**By Moseley September 6, 2023**

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So, what are we going to do? So, I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

**Time's Up for Landfills**

**'Gentle' demolition strategies can help preserve resources**

**PAULA BENDER April 2, 2024**

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

**Drought Conditions on Hawai'i Island Prompt Water Supply Message**

**by Big Island Video News  
on Oct 5, 2023 at 3:59 pm**

**(BIVN)** – With moderate to severe drought conditions being reported across Hawai'i Island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information **from the U.S. Drought Monitor**. There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Kā'ū.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawaii%CA%BBi-Island-prompt-water-supply-message/>

**U.S.**

**Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**

**By Li Cohen**

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to **significant droughts**, and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the **world's largest surfing wave pool** opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. " ... We are on the verge of a greater catastrophe."

"We are in a [water crisis](https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/), that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawaii, told CBS News, saying that if the reasons for this crisis aren't soon addressed, **"We may come to a point where we have to decide ... who gets water and who doesn't."**

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island parts need to be shipped and the power plant has generators that are not working and because of this, and other reasons, the Big Island needs to seriously conserve power so that everyone will have power, and if this problem of shipping parts can happen once it can happen again.

#### UTILITIES

UPDATE: HECO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HECO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity use is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power>

**Big power supply problems continue to plague Hawaii Island**

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

**Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.**

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

#### What You Need to Know

**-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity**

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

**Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150-room bungalow resort in?**

**Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keaouhou Bay, what traffic and increased population studies have they done? Because they will have employees with cars, guests with cars, visitors with cars and this would range at times at least over 200 cars parking above Keaouhou Bay causing serious car runoff pollution.**

Article below is from NOAA.

### What is the biggest source of pollution in the ocean?

Most ocean pollution **begins on land**.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off or sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the **destruction of sensitive marine habitats** such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of **sediments** into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

Does this EIS have any reports on noise pollution?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years and, "Noise Pollution

Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation

Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlmr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation->

[districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.](#)

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it.

Please read the Scientific articles written by NOAA, National Oceanic and Atmospheric Administration and other professional organizations, that prove that developments have ALWAYS polluted the water in every coastal development area.

**Has there been any reports in this EIS with regards to zooplankton and development and golf course pollution?**

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all Aquatic life there, and even the Manta Rays that go there to eat zooplankton from the Manta Ray tours at night, and they eat it during the day in that area as well because they need to eat 5 times their body weight in zooplankton daily. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

If you allow this bay to be developed, you will be contributing to the deaths of many types of marine life and there is NO WAY to stop this from happening because polluted runoff rain water from developments can't be fully stopped. It is what has happened in ALL coastal developments.

Please read the Scientific proof below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide..."

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off)." <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event>

[hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,had%20catastrophic%20impacts%20state%20wide.](#)

This article is by the Coral Reef Alliance here in Hawaii: "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawaii%CA%BB1%20reefs%20face%20major%20global,into%20Hawaii%CA%BB1%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forneyeb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forneyeb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. **Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban runoff, may be exacerbated under high thermal stress.** In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

**The Chesapeake Bay has a foundation that is trying to save it due to runoff pollution that was caused by developments, and the Chesapeake Bay is a lot bigger than Keauhou Bay.** If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed because this bay is very small.

This Article is by the Chesapeake Bay Foundation, "Saving a National Treasure", states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow ..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

**Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now, Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.**

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20leopardy.>

**If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay because it is so much smaller.**

**Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development, can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species."** <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0>.  
**Of:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide.**

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

The manta rays go Keauhou Bay every night to eat zooplankton and if you allow this development that WILL have runoff water, you WILL be causing zooplankton to be seriously affected because as this article by Marin BIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are

highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem...

Here is another article that proves runoff from development in this area will hurt and kill plankton, by **Frontiers in Marine Science**, "**Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon** The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

"Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by Marine BIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to%20light%20and%20increases%20in%20predation.>

Here is a research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "**Toxic Effects of Pollutants on Plankton** There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation." [https://scope.dpe.carnegiescience.edu/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dpe.carnegiescience.edu/SCOPE_12_3.6_chapter12_257-274.pdf)

The above articles show that development of Keauhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this could cause the manta ray food source to disappear and that will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on the manta ray tour for their income.

**Where in this EIS are the fully researched and studied reports on what will happen to plankton in Keauhou Bay if this development is allowed?**

**Where are the EIS reports on human density because this resort will increase this area in population. Below are reports that human population destroy coral reefs.**

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regards to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National Center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20are%20greater%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii: the less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment – especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=9630885&#:~:text=The%20less%20people%20at%20a%20site,there%20are%20the%20research%20found.&text=The%20million%20of%20tourists%20who%20world%20are%20new%20study%20said.>

If you allow this resort to be developed, you will be destroying the coral reefs in the bay. This bay is used by many locals who have a right to fish, canoe, swim, snorkel, paddle board, and surf here. It can't afford to be used by many thousands more people yearly.

If you allow Keauhou Bay to be developed there will be a higher population in the bay and that will hurt the coral in the bay as well, because it's known that, "Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with metapopulation theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science

Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation" <https://www.nature.com/articles/s41893-022-01021-1>

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**A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads. Where are the traffic study reports for this EIS? With 150 rooms comes over 150 cars because you must include employee cars, as well as visitors for the people staying in the resort, and what if the guests have more than one car?**

The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side.

Allowing another resort to be developed will bring more cars that will lead to a lot more traffic that the island cannot handle, please read the articles below by different NEWS companies that prove this point.

This NEWS article by Hawai'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Please watch their video on their link below because it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists comes more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state, this time last year Hawaii island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks...

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added. <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on the Big Island has increased drastically and safety issues and infrastructure need to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is the same for Big Island. The traffic problems they talk about are the same issues here on Big Island, and this article also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-iams-lets-talk-about-solutions/>

Please, watch the NEWS video below on aerial footage in Hilo because the footage shown is the same thing that is happening on Aali Drive and Queen K HWY, and for the same reasons, all of these roads only have 2 lanes.

There are 2 developments already on Aali Dr. being built as of today, and more are scheduled for this road in the near future, and Aali Dr. and Queen K HWY are the roads Kamehameha Schools Bungalow Resort will be using if approved and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems, traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well.

See the photo below that proves this point in Kona, and here is the NEWS article by KITV NEWS that talks about Hilo and the same thing is happening in Kona on the roads Kamehameha Schools wants to develop their resort, "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-iams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8423-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-iams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8423-8313ef8c4c19.html)

There was a crash on Aali Dr. and when there is an accident on this road, it turns into only one lane that needs a flagger to help direct traffic, and that adds even more traffic to this already seriously congested road, and Kamehameha Schools wants to add a resort on this road that will increase the traffic by 100's of cars.

Here is the Island News video on the crash on Aali Dr. <https://www.youtube.com/watch?v=FQSSnPDiI8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Please read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawai'i Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans  
-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path as well as The Law of the Splintered Paddle below <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

### **The Law of the Splintered Paddle**

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law, "kanawai Māmālahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless (especially kupuna and keiki) across Hawai'i be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, the law is part of Hawai'i's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
  - Knowing and doing what is pono (right)
  - Standing for the principle that leadership privilege is earned
  - Taking kuleana (responsibility) for those we serve
  - Doing so with compassion, love, and respect
- "We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

**The Law of the Splintered Paddle is also on Kamehameha Schools website**, so they should want to help make Big Island roads become safer and not add to the traffic and possible traffic death toll problem. <https://www.kstbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-true-200-years-after-k>

Besides a resort development in Keauhou Bay causing runoffs that will severely pollute the bay as the above research and science articles have shown, causing marine life to die, it will also increase the bay's population that will seriously add to damaging even more coral, plankton and all marine life as well, and

the island has severe traffic issues already with increased death tolls rising, and a resort development in Keauhou Bay will totally increase even more traffic in these already severely congested traffic areas.

The Big Island Doesn't Have the Resources and Infrastructure for Another Resort

Please see the articles below because the Big Island doesn't have the resources or infrastructure to safely add another resort development on island and these other NEWS and Research articles prove this point.

### 1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

### 2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years. " <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

### 3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste

Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

### 4)"What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VanDyke HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder VanDyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables->

5) "The overwhelming plastic waste Hawaii visitors leave behind  
By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/Plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A county commission drafts ordinance aiming to ban recyclables at West Hawaii'i landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawaii'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawaii'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawaii'i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII'I COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over a Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii'i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii'i Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "BIG ISLAND NEWS HECO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii'i State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST

\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) "LOCAL NEWS

HECO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii'i Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii'i Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii'i's power system from its water system, said Kawika Uyebara, deputy director of Hawaii'i County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-ohahu-are-asked-to-conserve-water-amid-power-outages>

16) U.S. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "we're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) News Hawaii'i County issues mandatory 25% water restriction for North Kona

August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawaii'i Water Supply Closely Monitored as Severe Drought Continues

by Big Island Video News

on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to their homes to help with power issues on the island.

20) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/?rdt=52660)

21) "News Hawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

According to the utility company, this is a usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will damage Keauhou Bay coral and marine life and, Big Island resources and infrastructure are currently being negatively affected from the development that is on island already, and there are years of new development that have already been approved, before having safe resources and infrastructures for new developments.

With these scientifically proven articles by some of the most professional scientists in the world, they say a serious population increase, as well as development and resort runoff that happens because of parking lots, and... with all coastal developments, it will be dangerous for Keauhou Bay to be developed because it will damage the marine ecosystems in the area.

Please, save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools because all of these articles prove it would be extremely damaging to the waters at Keauhou Bay.

Mahalo for your consideration,

Laura Johnson

Kailua Kona

## Jon Jokiel

I agree that Commercial Operations should be located away from sensitive areas. I'm not sure what low impact lodging means? If you are creating more lodging for the tourists, it's not going to be low impact. The additional traffic and congestion to this area is not sustainable unless roads are improved. I have doubts that cultural programming will actually be increased. I'm not in agreement with this Management Plan as it looks too big for this precious area.

## Keri Jones

Aloha, I am writing regarding concerns in the Keauhou Bay development project. Whereas I am happy it includes some restoration of cultural sites, I believe tourism housing and promotion overall in this area is a mistake. I have seen the damage tourism has done to the waters off Kona in the past 20 years, and without mandatory education and control of human impact, this will only worsen. As a resident, I am also concerned about further stressing the infrastructure in the Kona area. We have regular power outages, low hospital capacity, water system failures, sewage spills, and already inadequate road systems, especially in tsunami evacuation areas. Creating another tourism area in an already stressed bay at a time when the state is trying to shut down vacation rentals, which disperse the impact of tourism more widely, makes no sense. Let's take care of the land and water and people already here then talk about more tourist development. We don't want to be another Waikiki.

---

**From:** Keri Jones <[REDACTED]>  
**Sent:** Saturday, July 20, 2024 9:37 AM  
**To:** 221053-01 KS Keauhou Entitlements  
**Subject:** Keauhou Bay development

**Categories:** Yellow Category

Aloha,  
I am writing regarding concerns in the Keauhou Bay development project. Whereas I am happy it includes some restoration of cultural sites, I believe tourism housing and promotion overall in this area is a mistake. I have seen the damage tourism has done to the waters off Kona in the past 20 years, and without mandatory education and control of human impact, this will only worsen. As a resident, I am also concerned about further stressing the infrastructure in the Kona area. We have regular power outages, low hospital capacity, water system failures, sewage spills, and already inadequate road systems, especially in tsunami evacuation areas. Creating another tourism area in an already stressed bay at a time when the state is trying to shut down vacation rentals, which disperse the impact of tourism more widely, makes no sense. Let's take care of the land and water and people already here then talk about more tourist development. We don't want to be another Waikiki.

Mahalo  
Keri Jones  
Captain Cook, HI

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**From:** nawahine kahoopii <[REDACTED]>  
**Sent:** Tuesday, August 6, 2024 12:09 PM  
**To:** 221053-01 KS Keauhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keauhoubay@ksbe.edu  
**Subject:** Keep Keahou safe

**Categories:** Yellow Category

To whom it may concern,

Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keauhou Bay.

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "*What is the biggest source of pollution in the ocean?*" by NOAA, *National Oceanic and Atmospheric Administration*, states, "*When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides.*" It also states, "*Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called nonpoint source pollution, which occurs as a result of runoff.*"

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "*Putting the Earth in Play: Environmental Awareness and Sports*," shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endangered these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,  
Nawahine Kaho'opi'i



Senator Dru Mamo Kanuha

Please see attached.



**The Senate**  
**Office of the Majority Leader**

STATE CAPITOL  
HONOLULU, HAWAII 96813

**Senator Dru Mamo Kanuha Comments Regarding**  
**KEAHOHU BAY MANAGEMENT PLAN DRAFT EIS**  
Date Submitted: June 26, 2024

Thank you for the opportunity to provide my comments regarding the Draft Environmental Impact Statement (DEIS) of the Keaouhou Bay Management Plan, which was published on June 23, 2024 with the State of Hawai'i Office of Planning and Sustainable Development. At this time, I have been pleased with Kamehameha Schools' (KS) emphasis on community engagement throughout this process, including with my Senate office, to ensure that all community members have a chance to provide their mana'o on the impacts of KS' plans for the future.

Keaouhou Bay represents not only a revered community gathering place, but more importantly a living artifact of Native Hawaiian history. As the birthplace of Kauikeaouli, who would later become Kamehameha III and Mō'i o Ke Aupuni 'o Hawai'i in 1814, Keaouhou, in the ahupua'a of Kahalu'u, holds some of our most culturally significant ancient sites and historic event locations that forever changed Hawai'i's history.

With the high-use of Keaouhou Bay by residents, visitors, and community groups in present times, I see much value in devising comprehensive management plan that aims to address the challenges that have resulted from these multiple uses that sometimes conflict with one another in a relatively confined geographic space. To this regard, I appreciate KS' reorientation of commercial activities away from culturally-sensitive areas, as well as their intent to establish a place-based cultural education center.

Furthermore, I trust that KS will continue to engage the community throughout the entire process, especially concerning the proposed lodging in the resort-zoned plateau mauka of Keaouhou Bay. Ensuring ongoing dialogue and collaboration will be crucial to balancing development with the preservation of cultural and historical integrity, benefiting both current and future generations.

Mahalo again for the opportunity to provide my mana'o, and should you have any questions with regard to the foregoing, please do not hesitate to reach out to my office.

Me ka ha'aha'a,

Senator Dru Mamo Kanuha  
3<sup>rd</sup> Senatorial District (Kona, Ka'u, Volcano)

## Alexis Kerver

Aloha pumehana,

My name is Alexis Kerver. I grew up in Kealahou and currently reside in Ka'u. My 'ohana resides in Holualoa and I am a haumana of a hālan located in Keaouhou mauka. Keaouhou Bay is a special place to my heart and I care deeply about the health and well-being of this honorable and significant place. I have a Masters degree in Natural Resources and Environmental Management with a speciality in Environmental Policy and Economics from the University of Hawai'i at Mānoa. I am writing to provide brief commentary on the draft EIS for the Keaouhou Bay Management Plan, specifically in regard to the proposed bungalow resort development. While I acknowledge and agree with the need for reorganization of existing infrastructure and activities, and the potential economic benefits of this project, I have significant concerns regarding the environmental and social impacts of the proposed bungalow resort, particularly related to water usage and environmental protection. I also find that the current Draft EIS lacks sufficient detail on these critical issues.

### Environmental Concerns

**Removal of Vegetation Buffer:** The proposed development plans to remove the last buffer zone of vegetation that protects Keaouhou Bay from runoff. This vegetation is essential for filtering pollutants, reducing erosion, and maintaining the bay's water quality. Its removal could lead to increased runoff, pollution, and sedimentation, negatively impacting the marine ecosystem.

**Recommendation:** Retain and enhance the existing vegetation buffer zone by removing the invasive vegetation and restoring a native dryland forest. Profit generated from the new recreation services and restaurant proposed in the project management plan could support the restoration of this native dryland forest and provide conservation jobs and educational opportunities for the youth and residents of Kona. Regular monitoring of water quality should be mandated to ensure that the development of the other project components do not adversely impact the bay.

### Water Usage Concerns

**Drought Conditions and Water Consumption Limits:** Kona is experiencing significant drought conditions, and residents are frequently subject to water consumption limits. Introducing another resort in this area, which already has substantial resort development, will place further strain on our limited water resources. This development will likely, in the long term, prioritize water use for tourists over residents, exacerbating existing water shortages.

**Recommendation:** Develop a comprehensive water management plan that prioritizes conservation and sustainable use. This should include advanced water-saving technologies such as greywater recycling, rainwater catchment, and low-flow fixtures. Additionally, the project should commit to offsetting its water use by contributing to community water conservation initiatives and infrastructure improvements.

### Insufficient Information in Draft EIS

**Lack of Water Consumption Plan:** The current Draft EIS does not provide sufficient information on Kamehameha Schools' plan for water consumption. Given the severe drought conditions and recurring water restrictions in Kona, a detailed water management strategy is crucial for assessing the project's feasibility and impact.

**Recommendation:** The EIS should include a detailed water consumption plan outlining how the resort will source, use, and conserve water. This plan should address potential impacts on local

water supplies and include mitigation measures to ensure that the development does not exacerbate water scarcity for residents.

I understand you may read the above statement pertaining to water and think about the numerous operations in Kona already using limited water resources and say "everyone else is doing it why not us", however, for this exact reason it is every more pertinent that Kamehameha Schools leads by an example in the area of development and considers these broader impacts often overlooked by foreign developers more deeply. A precedent of over-development in coastal regions has already been set by existing development projects (for example, Hokulua and Kohanaiki). Kamehameha Schools has the opportunity to exemplify pono development and restore the area being considered for a bungalow resort to a native dryland forest that truly protects and preserves Keaouhou Bay and provides meaningful opportunities for our youth.

While the proposed bungalow resort development by Kamehameha Schools in Keaouhou Bay may offer economic benefits, the removal of the vegetation buffer and the increased demand for water in an area already struggling with drought conditions are significant concerns.

As established care-takers of 'āina with an endowment valued at 14.7 Billion (Google Financial, 2021), I trust that Kamehameha Schools and project leaders will 1) understand fully the potential irreversible environmental damage a resort development will have on Keaouhou Bay, 2) deeply consider the "opportunities" this provides for our keiki and local residents, and 3) provide the community with a robust and complete EIS statement, including a SMA Permit Application, prior to making any decisions to move forward.

I feel the Keaouhou Bay Management Plan is well intentioned and mostly provides a great vision for reorganizing the existing activities and providing some new opportunities and revenue streams. I absolutely and firmly oppose the development of the bungalow resort and encourage Kamehameha Schools to reconsider this component of the plan. Mahalo for considering my commentary and recommendations.

Respectfully,

Alexis Kerver, MEM,

Assistant Researcher/West Hawaii Site Facilitator, UH Mānoa CTAHR

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**From:** Kellie Klicup <[REDACTED]>  
**Sent:** Tuesday, July 23, 2024 2:35 PM  
**To:** Kellie Klicup  
**Subject:** Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT

**Categories:** Green Category

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keauhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keauhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keauhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.

#### ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keauhou Bay.

The Green Sea Turtle swims in Keauhou Bay weekly and the monk seal has also been seen swimming and resting in Keauhou Bay. Both of these marine animals are on the endangered species list.

Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to —

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

#### FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED

The green sea turtle is federally protected and can be seen in Keauhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Allowing this development WILL POLLUTE Keauhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!) states this fact clearly. Keauhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

#### THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keaou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keaou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keaou Bay will likely be changed forever.

This information is from a NOAA Scientist: "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keaou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keaou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keaou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keaou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keaou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keaou Bay and the surrounding area during the building phase of this enormous project.

#### GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinogolf.com/pages/the-environmental-impact-of-golf-courses>

"These pesticides will be in the pollution runoff that will enter Keaou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia. "

Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system."[https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where the Hawai'i government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

#### ALGAE BLOOMS KILL CORAL AND MARINE LIFE

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to

the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution..." <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAHOHU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

FURTHERMORE: "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

## ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keaouhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keaouhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keaouhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%20early%2085%20percent,pipeline%20s pills%2C%20says%20a%20new>

## The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershed.org.au/blog/the-impact-of-stormwater-car-emissions/>

## NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keaouhou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

## How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlmr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation->



determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban runoff)." <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,hard%20catastrophic%20impacts%20state%20wide.>

This article is by the Coral Reef Alliance here in Hawai'i. "An ecosystem under threat Hawai'i's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawai%CA%BBi%20reefs%20face%20major%20global,into%20Hawai%CA%BBi%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban runoff, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawai'i." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawai'i has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

"That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%20based%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-*a* concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria) indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20al,so%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

#### HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human->

impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keaouhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations>.

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keaouhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation>.

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews-go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%20the%20research%20found,&text=The%20millions%20of%20tourists%20who,world%20d%20a%20new%20study%20said>.

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation>.

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation" [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhalhijAmWaq453rRgN0ajWel9mR3ZoTv0PyGzA5lc\\_H001zcHNIP3ASnhcgkRy6\\_vkLPw49dbmBYoXSg3Y1MgQIGBZsapdGUH1701SLbu9x5P1-3xD4Kxl4T0slvgQ1a7Z2Rt3Ubraxpodjd2AonNISmWSuxB7jEDdpj80Gjpx71TjWdCXvFKjZYen djfj3Sw\\_dnaUg5IZlhcgPBDImmaH15yqT5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhalhijAmWaq453rRgN0ajWel9mR3ZoTv0PyGzA5lc_H001zcHNIP3ASnhcgkRy6_vkLPw49dbmBYoXSg3Y1MgQIGBZsapdGUH1701SLbu9x5P1-3xD4Kxl4T0slvgQ1a7Z2Rt3Ubraxpodjd2AonNISmWSuxB7jEDdpj80Gjpx71TjWdCXvFKjZYen djfj3Sw_dnaUg5IZlhcgPBDImmaH15yqT5Q%3D&tracking_referrer=abcnews.go.com)

INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide,

hotels produce almost 300,000 tonnes of waste each year." <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keauhou Bay. On Hawaii's Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawaii's landfill

September 17, 2023

The West Hawaii's Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawaii's landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

A County commission drafts ordinance aiming to ban recyclables at West Hawaii's landfill

By Megan Moseley September 6, 2023

Hawaii's County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawaii's County Director of Environmental Management, told commissioners the West Hawaii's Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawaii's government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

Drought Conditions On Hawaii's Island Prompt Water Supply Message

by Big Island Video News  
on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information from the U.S. Drought Monitor. There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'i.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawai%CA%BBi-island-prompt-water-supply-message/>

U.S.

Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to significant droughts, and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the world's largest surfing wave pool opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. " ... We are on the verge of a greater catastrophe."

"We are in a water crisis, that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawai'i, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

UPDATE: HELCO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity us is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

Big power supply problems continue to plague Hawaii Island

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrulumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES

A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawai'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state. This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: All of these roads only have two lanes!

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=-FQSnPDji8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii's Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC AND WASTEWATER:

1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff | January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

"The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4)"What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17, 2022

The West Hawai'i Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) "The overwhelming plastic waste Hawaii visitors leave behind By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips."

<https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfills." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawai'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawai'i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealahoe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawai'i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawai'i Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs, Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii's State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) HELCO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output "Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii's Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawika Uyebara, deputy director of Hawaii's Department of Water

Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) News Hawaii'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawaii's Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawaii, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-CA%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiiaelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/?rdt=52660)

20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 - 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

#### HISTORICAL AND CULTURAL SIGNIFICANCE:

The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, the law is part of Hawaii's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

-Caring for and serving one's people

-Knowing and doing what is pono (right)

-Standing for the principle that leadership privilege is earned

-Taking kuleana (responsibility) for those we serve

-Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

The Law of the Splintered Paddle is also on Kamehameha Schools' website. The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.

#### IN CONCLUSION

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that adding another development is going to cause devastating, lasting, effects on the Eco-system at Keauhou Bay.

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other.

In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace

of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels.

The trees that currently stand on the land that is threatened to be developed clearly protect the marine life and environment from further damage. The location is not suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen.

Please save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.

Mahaalo,

Kellie Kilcup

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**From:** Patricia Knezek <[REDACTED]>  
**Sent:** Monday, August 5, 2024 4:56 AM  
**To:** 221053-01 KS Keauhou Entitlements; Alex.Roy@hawaicounty.gov; Planning@hawaicounty.gov; Keauhoubay@ksbe.edu  
**Cc:** Patricia Knezek  
**Subject:** Kamehameha Schools EIS Draft: For Keauhou Bay WILL HAVE NEGATIVE IMPACT

**Categories:** Yellow Category

Hello,

Below I cut and past the already researched letter that has been provided. But I want to take a moment to send a personal plea to reject the Kamehameha Schools Environment Impact Statement (EIS) for Keauhou Bay to become a Bungalow Resort. My sister and I own a condo at Keauhou Palena. We deliberately bought in this area because it was \*not\* overdeveloped, it had easy access to a beach used by locals, it is a quiet and relatively low-traffic area, it is relatively unpolluted, and it offers a sense of ohana. I lived on Oahu for a while as a child, and I have watched that disappear there. My sister and I bought this condo to retire in. We are NOT resort people, we do not support this development. As noted below, the scientific evidence indicates that the development \*will\* have a negative impact on the area and its flora and fauna. Please leave this local area local.

Thank you - Patricia Knezek  
Keauhou Palena #1304

\*\*

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keauhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keauhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is **scientifically proven** that developments pollute nearby waters both **during and after development**.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have **ALWAYS** polluted the water in **EVERY** coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development **WILL be CHANGING an Entire Ecosystem.**

#### **ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT**

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

#### **Endangered Species Act**

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

#### **FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED**

The green sea turtle is federally protected and can be seen in Keaouhou Bay weekly.

The following article that states: "**POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES**"

#### **Why does Hawaii have a runoff problem?**

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According

to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

**Allowing this development WILL POLLUTE Keaouhou Bay.** The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keaouhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen **because developments have been shown to ALWAYS pollute the water is that is nearby.**

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the [Endangered Species Act \(ESA\)](#), and additionally protected by [Hawai'i Revised Statutes Chapter 195D \(HRS\)](#) and [Hawai'i Administrative Rules \(HAR\) 13-124](#)." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

#### **THE ENDANGERED MONK SEAL WILL BE AFFECTED**

Keaouhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keaouhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

**Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keaouhou Bay will likely be changed forever.**

This information is from a NOAA Scientist: "**Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie!'**" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered [Hawaiian monk seals](#). They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the [Marine Mammal Protection Act \(MMPA\)](#), as well as locally by Hawai'i Revised Statutes (HRS) [Chapter 195D](#) and Hawai'i Administrative Rules (HAR) [13-124](#)." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

**Keauhou Bay is the monk seals and the green sea turtle's habitat.** Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. **By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.**

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to **protect the land around Keauhou Bay** from developments that destroy the habitat of these endangered species with pollution and runoff.

**Does this EIS have any reports on the endangered species that frequent Keauhou Bay? This is their habitat and it needs to be "conserved".**

Under the **Conservation Program** there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrscurrent/Vo103\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vo103_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrscurrent/Vo103\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vo103_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project.

#### **GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS**

"The golf industry uses [approximately 50 pesticide active ingredients](#), including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "

Most drains have a single large exit at their point of discharge (often covered by a [grating](#)) into a [canal](#), river, lake, [reservoir](#), sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEE-Z.15.14.pdf> where **the Hawai'i government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keauhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.**

**These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.**

Under Section 2 (b) of the Endangered Species Act - **Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species.** It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

#### **ALGAE BLOOMS KILL CORAL AND MARINE LIFE**

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

**Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.**

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development,

it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

### **Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?**

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution..

" <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

### **Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?**

This needs to be fully assessed because **you will be changing an entire ecosystem** to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

**FURTHERMORE:** "If there are [toxic algae blooms](#), like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservation.org/blog/2023/03/31/what-sea-foam/>

## **ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN**

### **Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?**

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

### **The article below is from NOAA regarding motor vehicle engines and pollution to the sea.**

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife

habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirty%20ocean%20be%20a%20pollutant.>

### **Land-based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects**

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a [new report](#) from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20saves%20a%20new>

### **The Impact Of Stormwater – Car Emissions**

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating

local waterways." <https://www.stormwatershedshelpers.org.au/blog/the-impact-of-stormwater-cal-emissions/>

### **NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE**

**Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?**

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

### **How Does Noise Pollution Harm Marine Species?**

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

### **What is ocean noise?**

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and

offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

### **LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS**

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is **a lot bigger** than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

**This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states,** "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20leopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

## **MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN**

**Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?**

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

### **It's Been Proven Developments Severely Pollute Nearby Waters**

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii". Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts statewide...

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban runoff). " <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,hard%20catastrophic%20impacts%20state%2Dwide.>

**This article is by the Coral Reef Alliance here in Hawaii.** "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawai%CA%BBi's%20reefs%20face%20major%20global,into%20Hawai%CA%BBi's%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "**Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019...**

**We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban runoff, may be exacerbated under high thermal stress.** In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

**"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.**

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat>

**Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,... can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species."** <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "**Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide.**" <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. **Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.**

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_coral/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_coral/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water..." (All of those are show up in every development project.)

**Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival"** [https://oceanservice.noaa.gov/education/tutorials/coral\\_coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorials/coral_coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

#### **It's Been Proven Resort Developments Kill Marine Life**

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem...."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. **This occurred in a relatively short time considering that the experiment lasted less than three weeks.** The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

**The ecosystem is fragile and interconnected as is stated in this article:** "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, **"Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage.** Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in

natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

#### **HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH**

**Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?**

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: **The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life.**" <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

**Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.**

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal->



### **Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill**

September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

### **A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill**

By [Megan Moseley](#), September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

### **Time's Up For Landfills**

'Gentle' demolition strategies can help preserve resources

16

PAULA BENDER April 2, 2024

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

### **Drought Conditions On Hawai'i Island Prompt Water Supply Message**

by Big Island Video News  
on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information [from the U.S. Drought Monitor](#). There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

### **From a Water Supply news release:**

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawai%CA%BBi-island-prompt-water-supply-message/>

[U.S.](#)

### **Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**

By [LiCohen](#)

17

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to [significant droughts](#), and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the [world's largest surfing wave pool](#) opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe."

**"We are in a water crisis, that has to be made very clear,"** Wayne Tanaka, director of Sierra Club of Hawaii, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

#### UPDATE: HELCO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity use is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

#### Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind

18

generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

#### Big power supply problems continue to plague Hawaii Island

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

**The company explained that it faces an "extremely tight" supply of power at peak use periods,** especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

#### Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

19

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

**-If there is not enough electricity to meet demand**, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

## **FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES**

**A Resort Development Will Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?**

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawaii News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "**Hawaii Island has most traffic fatalities in state**. This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

**"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here,"** he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

**The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.**

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/langty-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: **All of these roads only have two lanes!**

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313e8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313e8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FQ5snPDjI8>

**Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.**

**Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:**

3) **Hawaii Island Has Decades of Landfill Space But Still Faces Challenges in Dealing With Its Waste**  
Hawaii'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) **"What happens to Hawaii Island's trash and recyclables?"** By MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables->

5) **"The overwhelming plastic waste Hawaii visitors leave behind**  
By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) **"A County commission drafts ordinance aiming to ban recyclables** at West Hawaii'i landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawaii'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) **"Hawaii'i County issues mandatory 25% water restriction** for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii'i Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

**"That's just Big Island traffic,"** is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

## **MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC and WASTEWATER:**

1) **Hawaii Deals with Burgeoning Waste Management Problem**

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) **"Big Island Now readers seem to agree that there's likely no** single solution for slowing down the timeline of the West Hawaii'i Sanitary Landfill reaching capacity.

The West Hawaii'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill>

8) **"Hawai'i Water Supply Closely Monitored As Severe Drought** Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions. <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca-%BBI-under-severe-drought/>

9) **"Big Island Concerns About Water Quality** Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona. <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) **"Researchers find sewage from an oceanfront** Big Island community reaches nearshore waters Hawai'i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawai'i Department of Health. <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) **"Kona coast faces stark wastewater tradeoffs,** Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) **"HELCO restores power after initiating emergency outages** on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30. <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) **Hawai'i State News Update: Hawaiian Electric initiates** rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of

generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) **HELCO issues rolling power outages around Big Island** by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night. <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) **"Here's how power outages can have repercussions** for Hawai'i's water supply Hawai'i Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawai'i Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawai'i's power system from its water system, said Kawika Uyebara, deputy director of Hawai'i County's Department of Water Supply. <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-ohahu-are-asked-to-conserve-water-amid-power-outages>

16) **US Hawaii is "on the verge of a greater catastrophe,"** locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) News Hawai'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) **Hawai'i Water Supply Closely Monitored As Severe Drought** Continues

by Big Island Video News on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai%C4%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

**19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."**

[https://www.reddit.com/r/Bigisland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_la/rlge/7rtdt=52660](https://www.reddit.com/r/Bigisland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_la/rlge/7rtdt=52660)

**20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators**

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

## **HISTORICAL AND CULTURAL SIGNIFICANCE:**

### **The Law of the Splintered Paddle**

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

26

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kanāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, **the law is part of Hawaii's State Constitution today.**

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

**"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."**

**The Law of the Splintered Paddle is also on Kamehameha Schools website.** The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

**Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.**

## **IN CONCLUSION**

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keauhou Bay and "The Endangered Species Act of 1973 (ESA or "The Act"; 16 U.S.C. § 1531 *et seq.*) is the primary law in the United States for protecting and conserving imperiled species. Designed to protect critically imperiled species from *extinction* as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President **Richard Nixon** on December 28, 1973. The **Supreme Court of the United States** described it as

27

"the most comprehensive legislation for the preservation of endangered species enacted by any nation".<sup>[1]</sup> [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other. This land MUST be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come.

In addition to the natural disaster this will cause, Hawaii Island is already having serious infrastructure and resource issues that have yet to be solved. These issues MUST be solved before considering another resort development on Big Island.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is NOT suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen.

Please save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.

## Paul Koenigshofer

From what I can see now this plan is far too big. We already face traffic problems from the tour boat operators that are overusing the Bay. Too many tourists speeding up and down Kam 3 to get to the tours. Now with your proposed plan to expand development the traffic will only become worse. I saw how big you parking lots are and worry very much about how many people this is going to put in our very small bay. I also worry what all these cars will do to the water quality. The oil, and the tire dust that will run into the bay when it rains. This will be devastating. I'm also worried about what your develop plan will do to the special place where there are some old ruins of old Hawaiian settlement and shoreline on the south/end tip of the bay, and also the small beach area, and end of Slide. Also the King's Birthplace area. I believe injecting this amount of people into the Bay is going to be too harmful and life-changing for what it is now. Way too much parking, way too many tour operations, and way too much parking and pavement. Please do not let it happen like this. I believe it will ruin this sacred and beautiful Bay, and change our neighborhood drastically forever.

## Jessica Kuzmier

To who it may concern,

I am writing in opposition to the current EIS Draft for Keauhou Bay. I am not opposed to the education center, but I believe that the proposed bungalow resort plan will do untold damage to the landscape and to the ocean below. I have read up on this area, and I believe that the undeveloped land is a kind of sink to absorb a great deal of fertilizer and runoff from the golf course. I also have heard how the undeveloped land is a barrier for when there is heavy rain, preventing harmful algae blooms due to heavy rain. Given this, although it is claimed to be 'low impact', any infrastructure leading to the bungalows will only decimate what is right now acting as a barrier to additional damage to the bay.

I really like the idea of the historical sites being cleaned up and believe this would provide a wonderful educational opportunity for the students to undertake this mission. I've heard that the KS would also restore the cave there, which I believe would be wonderful as well. But I can't in good conscience feel that this proposed resort is good for the area and the community. As the island (and state in general) is entering a period of considering the impacts of overtourism, adding a whole new one in an area that is a historical site with ecological and cultural heritage does not seem aligned with this objective. I am also against the development of Old Kona Road, as this also seems to be carved right into a fragile ecosystem. If it does anything at all to mitigate traffic congestion I believe it will be offset by the additional traffic that the resort will create and all the additional parking services that will be entailed.

Mahalo for taking the time to hear my views. Jessica Kuzmier, Kona Town

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**From:** Jessica K <[REDACTED]>  
**Sent:** Wednesday, July 31, 2024 2:51 PM  
**To:** 221053-01 KS Keauhou Entitlements  
**Cc:** Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keauhoubay@ksbe.edu  
**Subject:** Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT

**Categories:** Yellow Category

To who it may concern,

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Mahalo for taking the time to hear my views. Jessica Kuzmier, Kona Town

**From:** Benjamin Balberdi [REDACTED]  
**Sent:** Friday, August 2, 2024 10:43 AM  
**To:** Cody Winchester  
**Cc:** Marissa Harman; Michelle Swartman; Crystal Kua  
**Subject:** Fw: [EXTERNAL] Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT

I see that the email was direct to G70 with KS cc'd. @Cody Winchester - did you respond from the G70 account?

Mahalo,  
Ben

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**From:** Jessica K [REDACTED]  
**Sent:** Wednesday, July 31, 2024 2:50 PM  
**To:** <KeauhouBay@g70.design>  
**Cc:** <Alex.Roy@hawaiicounty.gov>; <Alex.Roy@hawaiicounty.gov>; <Planning@hawaiicounty.gov>; <Planning@hawaiicounty.gov>; keauhoubay <keauhoubay@ksbe.edu>  
**Subject:** [EXTERNAL] Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT

**CAUTION: This email is from an outside sender. Do not click on links or open attachments unless you recognize the sender and know the content is safe.**

To who it may concern,

I am writing in opposition to the current EIS Draft for Keauhou Bay. I am not opposed to the education center, but I believe that the proposed bungalow resort plan will do untold damage to the landscape and to the ocean below. I have read up on this area, and I believe that the undeveloped land is a kind of sink to absorb a great deal of fertilizer and runoff from the golf course. I also have heard how the undeveloped land is a barrier for when there is heavy rain, preventing harmful algae blooms due to heavy rain. Given this, although it is claimed to be 'low impact', any infrastructure leading to the bungalows will only

decimate what is right now acting as a barrier to additional damage to the bay.

I really like the idea of the historical sites being cleaned up and believe this would provide a wonderful educational opportunity for the students to undertake this mission. I've heard that the KS would also restore the cave there, which I believe would be wonderful as well. But I can't in good conscience feel that this proposed resort is good for the area and the community. As the island (and state in general) is entering a period of considering the impacts of overtourism, adding a whole new one in an area that is a historical site with ecological and cultural heritage does not seem aligned with this objective. I am also against the development of Old Kona Road, as this also seems to be carved right into a fragile ecosystem. If it does anything at all to mitigate traffic congestion I believe it will be offset by the additional traffic that the resort will create and all the additional parking services that will be entailed.

Mahalo for taking the time to hear my views. Jessica Kuzmier, Kona Town

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**From:** Keller Laros <[REDACTED]>  
**Sent:** Thursday, July 25, 2024 6:19 PM  
**To:** 221053-01 KS Keaouhou Entitlements  
**Cc:** Manta Pacific  
**Subject:** Support for Keaouhou Bay Management Plan EIS

**Categories:** Green Category

Aloha,  
I am writing to express my support for the Keaouhou Bay Management Plan and the draft EIS. I have been scuba diving at Keaouhou since I logged my first manta ray night dive on August 13, 1985. In the intervening 38 years, and over 14,500 logged scuba dives, I've seen very few improvements to the infrastructure surrounding the bay despite a giant increase in the recreational and commercial use of the bay.  
I have been fortunate to see the Kamehameha presentation of their proposed plans to improve the shore facilities twice. They display a commitment to improving the area culturally, structurally, recreationally and commercially.

I think they seem to have a good plan to greatly improve the land around Keaouhou Bay for the community, the environment and Kamehameha schools.

Please advance the proposed improvements to Keaouhou Bay.

Thank you.  
Sincerely  
Keller Laros

[REDACTED]  
[REDACTED]  
[REDACTED]

Sent from my iPhone

Dear Kamehameha School Trustees:

I am writing to ask that you reconsider (and reject) the current management plan for Keaouhou Bay. Although the plan may advance point #4 of your mission ["Optimize and invest in revenue opportunities that align to the betterment of our beneficiaries or the management of our assets and provide long-term economic returns"], I believe that it will permanently negatively impact points 1-3 of your mission and therefore the plan should be rejected. I do NOT believe that the current plan will:

- Establish and expand place-based cultural stewardship activities to cultivate a strong Native Hawaiian identity.
- Support engaging, high-quality, and meaningful educational experiences that include a strategic collaboration with other organizational partners
- Support nurturing a positive and enduring relationship with community members within the Keaouhou Bay region that share similar values and a commitment to education, 'āina, and culture

Who am I and why do I think this? I am a visitor from Pennsylvania who has been coming to the Big Island for more than fifty years. I first came right out of high school—in 1974. I came again in 1983 with my husband. And in 2000, I came with my husband and son, and we've been coming back almost every year since 2000. I am an emerita law professor and I've spent two sabbaticals here. Since my retirement, I've been spending 10 weeks here each year. We try to learn about Hawaii's history and respect the culture while we are visiting and while we are away. Starting with our 2000 visits, we have stayed in the Keaouhou Bay area, in rentals located on or off Kam3. I was around when the Kamehameha Schools decided to allow owners—many of whom are from the Mainland - to convert their leasehold interests to fee simple interest ownership.

Over the course of 50 years, I've seen many changes on the Big Island—some are positive, but many are not. The land and the ocean are central to all of Hawaii and its communities. They are certainly central to Native Hawaiian identity. But they are also central to all the kamaaina who live here and to visitors like me. I fear that the short term financial gain that the Kamehameha schools might realize by developing "sustainable, low rise, low-impact lodging on resort-zoned upper plateau of Bay" will be offset by the long-term impacts of yet another resort development. I know from friends and from news sources that Hawaii has issues with sufficient water and sewage treatment. It seems sensible to make sure these issues are addressed before putting more strain on the existing systems. The plan will necessitate additional parking—I know from my experiences at home that covering land with parking creates issues for the 'āina. From what I have read, the development is likely to create periodic runoff issues for the ocean and negatively impact the ocean and sea-life, which are already under stress from a warming climate and lack of sufficient sewage treatment which leads to more frequent Brown Water closures. See, e.g., the [3/20/24 EPA Region 9 consent order](#), with the County of Hawaii regarding its insufficient sewage facilities, Docket NO. CWA-309(a)-24-003 ).

Anecdotally and as a long-time snorkeler, one of the things I've noticed over the years is how the color of some of the tropical fish has changed, as they and their food chain are forced to eat more algae and eat fewer varieties of coral. Another example - I used to call Kalahele turtle beach because of the number of turtles we would see there on every snorkel, including on the beach. That number is now severely reduced. I fear the same will happen at Keaouhou Bay. The ocean and sea-life are already stressed—the management plan would certainly add to the stressors facing the Bay and the ocean. And...in addition to everything else, putting in new commercial space when there are so many vacant spaces around town seems wasteful. Please note the number of empty stores in the Keaouhou Shopping Center, which is less than one mile away and which the Kamehameha Schools also owns and manages. Similar to the conversion of the leasehold interest condos to fee simple condos, once this change is made, it cannot be undone.

One of the songs I play with my various ukulele groups is Waimanalo Blues—"The beaches they sell to build their hotels my father and I once knew...Singing Waimanalo Blues." This is a very powerful song. I urge the Trustees to avoid the temptation of this "revenue opportunity." I truly believe that if you trustees carefully examine your mission, you will agree that the best exercise of your fiduciary duty is to reject the proposed management plan. It is not consistent with Princess Pauahi Paki's vision. Although there are aspects of the proposed management plan that are very positive and promote the culture and protect the land, I fear that the overwhelming impact will be negative. There will be more traffic, resort housing that does not help alleviate the affordable housing crisis on the island, excess commercial space, and permanent negative impacts on the land and sea. Once lost this is unlikely to be regained.

Please examine your **ENTIRE** fiduciary duty and **REJECT** the management plan. If you haven't read the book "**Broken Trust**" by (Judge and Native Hawaiian) [Samuel P. King](#) and [Kandall W. Roth](#), a University of Hawaii law professor, I urge you to do so before making your decision about Keaouhou Bay.

Sincerely yours, Laurel S. Terry

**From:** keahoubay <keahoubay@ksbe.edu>  
**Sent:** Monday, August 12, 2024 8:14 AM  
**To:** Laurel Terry  
**Cc:** 221053-01 KS Keahou Entitlements  
**Subject:** Re: [EXTERNAL] Please reject the KS Keahou Bay Management Plan request for a special use permit

Yellow Category

Aloha e Laurel,

Thank you for submitting your comments regarding the Draft Environmental Impact Statement (DEIS) for the Keahou Bay Management Plan. We appreciate your engagement in this important environmental review process.

Please be advised that we have received and administratively recorded. However, it is important to note that your submission was made after the closure of the official 45-day comment period as outlined in the Hawaii Administrative Rules 11-200.1-25 (Public Review Requirements for Draft Environmental Impact Statements). Consequently, comments received outside this designated period are not required to be addressed or considered in the final decision-making process.

However, Kamehameha Schools, as the Applicant, values all feedback and may choose to consider the validity, significance, and relevance of any substantive comments provided as it pertains to the scope, analysis, and process of this DEIS.

Thank you once again for your participation.

Mahalo,

The Keahou Bay Project Team

**From:** Laurel Terry <[REDACTED]>  
**Sent:** Thursday, August 8, 2024 10:00 AM  
**To:** Planning@hawaiicounty.gov <Planning@hawaiicounty.gov>; Alex.Roy@HawaiiCounty.gov <Alex.Roy@HawaiiCounty.gov>  
**Cc:** keahoubay <keahoubay@ksbe.edu>  
**Subject:** [EXTERNAL] Please reject the KS Keahou Bay Management Plan request for a special use permit

**CAUTION: This email is from an outside sender. Do not click on links or open attachments unless you recognize the sender and know the content is safe.**

Dear Mr Roy, Ms. Kern, Ms. Hamman (and others),

First of all, I would like to thank the Kamehameha Schools for posting on its website a link to provide comments on the Draft EIS for the Keahou Bay Management Plan. I submitted the attached letter at that link.

Because the link was provided by the Kamehameha Schools and because the KS Trustees have the power to decide whether they want to proceed with their proposed management plan, I directed my comment letter to the KS Trustees. I urged them to think about their fiduciary duty broadly and to abandon the proposed Keahou Bay Management plan in its current form.

I am sending this email because I'm not sure who reviews the DEIS comments that are submitted online, and I want to make sure that I also reach out and direct my comments to the relevant County of Hawaii officials regarding the requested special use permit and the proposed Keahou Bay management plan.

I hope that the County decides that now is NOT the appropriate time to issue a special use permit that would authorize a new road at Keahou Bay and a new resort development. I would note that as I write this email, there is a 25% water conservation order because 2 of the wells are down. I also know that the County of Hawaii has serious sewage capacity issues. (In addition to the brown water alerts in the past month, and the EPA consent order referenced in my comment letter, I know that many of my friends in Kona who are on septic systems worry about their required conversion and the capacity of the local sewage systems.)

All in all, it seems that now is not the right time to place additional burdens on these systems that a new road and new resort area would add. As a visitor who has been staying in the Keahou Bay/Kam3 area for more than 20 years, I enjoy watching the local volleyball teams practice, the canoes, the families who fish and play in the water - especially on weekends - and the relative lack of development. I am a snorkeler, and I have noticed the negative impact that development has had on coral, fish, and honu. I recognize that the proposed management plan intends to enhance many cultural aspects of the area, but I fear that the overall impact of the management plan will be negative (and permanent) as the plan adds more resort condos, additional paved parking, a new road, and competition for a scarce resource. The ocean is already stressed - this plan will add to it. I hope the County denies the special use permit (and that the KS Trustees reconsider this plan.)

Mahalo,

Laurel Terry

PS Feel free to share this email. I am happy to speak further about the perspective of a long-time visitor. This message is the property of Kamehameha Schools and any attachments are confidential to the intended recipient at the e-mail address to which it has been addressed. If you are not the intended recipient, you may not copy, forward, disclose or use any part of this message or its attachments. If you received this transmission in error please notify the sender immediately by e-mail or contact Kamehameha Schools at webmaster@ksbe.edu and then delete this message from your system.

Heather Laursen

To Whom It May Concern,

I am ardently pleading for you to reject Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort. The Bungalow Resort development will have a detrimental and increasingly deleterious effect on Keaouhou Bay; at this time that we are aware of the species of our climate crisis, this is unacceptable that this Development project be considered in light of the research available to demonstrate the harm it will bring to our Bay. I would deem it irresponsible for you to accept this proposal, and I am seeing a growing concern from young who you may expect to bring you to court if your stamp of approval allows for this risk to our environment to occur.

The risks of polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project are demonstrated in research you should be aware of:  
National Oceanic and Atmospheric Administration (NOAA), <https://www.fisheries.noaa.gov/national/conservation/endangered-species-act>  
... showing that such developments in coastal areas pollute the water and endanger marine life and the delicate ecosystem.  
The green sea turtle and monk seal are endangered species that depend on Keaouhou Bay for habitat.  
<https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>  
<https://dlnr.hawaii.gov/dar/species/sea-turtles/>  
<https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-sealies/>  
<https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

The stretch of trees adjacent to the golf course has provided a barrier of protection from runoff of the chemicals from reaching the Bay, this development project would remove this barrier, and with development work overall, there will be harmful runoff into the Bay effecting marine life including our fast disappearing corals. My daughter attended WHEA and studied coral reefs for many years and she and her friends are greatly concerned to observe our coral reef and ecosystem in dire situation. Please take responsibility...this development will be vastly harmful to all that we love about being here in such a sacred place.

<https://rainorshiniegolf.com/pages/the-environmental-impact-of-golf-courses>  
<https://health.hawaii.gov/epo/files/2013/09/Stormwater-MSH-Presentation-HEF-7.15.14.pdf>

I have worked in Keaouhou Bay and swam in the waters for 16 years, it is a relatively pristine bay, compared to areas on the island where heavy development has affected the area. I am seeing my daughter after an occasion of heavy precipitation causing runoff from the golf courses, we were concerned with the degree of farming, the algae blooms in the waters. My daughter and I were concerned and confused at the time but then as we've become more educated we understand that it was because of the golf course polluting, with the trees removed in the furthering of development we will expect these waters to be blooming with algae, forming of the waters, and the marine life increasingly suffering.  
<https://www.globalcoral.org/golf-course-fertilizer-rnnoof-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef/>  
<https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

We claim it as historical, and so we should treat it as such, and respect it and keep it "less developed", as it is developed to a degree already of course, with businesses at the Bay and accommodation at Ourigger. And further development would be in contrast to the goals of Kamehameha Schools goal of sustaining the land. Their goal of educating on the history of King Kamehameha's birth site can still continue as even the Ourigger has a historical walk to educate tourists. We do not need to put our Bay and this historical site at risk through this development.  
Thank you for your time and consideration, I will eagerly look to your decision to deny this request for development. Any other decision will bring great consternation from the community.

Heather Laursen  
808-937-4462

**From:** Heather Laursen <[REDACTED]>  
**Sent:** Saturday, August 3, 2024 2:33 PM  
**To:** 221053-01 KS Keaouhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keaouhoubay@ksbe.edu  
Keaouhou bay project will have a negative impact on the ecosystem  
**Subject:** Yellow Category  
**Categories:**

To Whom It May Concern,

I am ardently pleading for you to reject Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort.

The Bungalow Resort development will have a detrimental and increasingly deleterious effect on Keaouhou Bay; at this time that we are aware of the speeding of our climate crisis, this is unacceptable that this Development project be considered in light of the research available to demonstrate the harm it will bring to our Bay. I would deem it irresponsible for you to accept this proposal, and I am seeing a growing concern from young who you may expect to bring you to court if your stamp of approval allows for this risk to our environment to occur.

The risks of polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project are demonstrated in research you should be aware of:

- National Oceanic and Atmospheric Administration (NOAA), <https://www.fisheries.noaa.gov/national/conservation/endangered-species-act>
- <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>
- <https://dlnr.hawaii.gov/dar/species/sea-turtles/>
- <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-sealies>
- <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

... showing that such developments in coastal areas pollute the water and endanger marine life and the delicate ecosystem.

The green sea turtle and monk seal are endangered species that depend on Keaouhou Bay for habitat.

- <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>
- <https://dlnr.hawaii.gov/dar/species/sea-turtles/>
- <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-sealies>
- <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

The stretch of trees adjacent to the golf course has provided a barrier of protection from runoff of the chemicals from reaching the Bay, this development project would remove this barrier, and with development work overall, there will be harmful runoff into the Bay effecting marine life including our fast disappearing corals. My daughter attended WHEA and studied coral reefs for many years and she and her friends are greatly concerned to observe our coral reef and ecosystem in dire situation. Please take responsibility...this development will be vastly harmful to all that we love about being here in such a sacred place.

- <https://rainorshiniegolf.com/pages/the-environmental-impact-of-golf-courses>

- <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf>

I have worked in Keauhou Bay and swam in the waters for 16 years, it is a relatively pristine bay, compared to areas on the island where heavy development has affected the area. I recall at Keauhou swimming with my daughter after an occasion of heavy precipitation causing runoff from the golf courses, we were concerned with the degree of foaming, the algae blooms in the waters. My daughter and I were concerned and confused at the time, but then as we've become more educated we understand that it was because of the golf course polluting, with the trees removed in the furthering of development we will expect these waters to be blooming with algae, forming of the waters, and the marine life increasingly suffering.

- <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef/>
- <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

We claim it as historical, and so we should treat it as such, and respect it and keep it "less developed", as it is developed to a degree already of course, with businesses at the Bay and accommodation at Outrigger. And further development would be in contrast to the goals of Kamehameha Schools goal of sustaining the land. Their goal of educating on the history of King Kamehameha's birth site can still continue as even the Outrigger has a historical walk to educate tourists. We do not need to put our Bay and this historical site at risk through this development.

Thank you for your time and consideration, I will eagerly look to your decision to deny this request for development. Any other decision will bring great consternation from the community.

Sincerely, Heather Laursen

Sent from my iPad

**From:** keauhoubay <keauhoubay@ksbe.edu>  
**Sent:** Monday, August 12, 2024 9:34 AM  
**To:** Mademoiselle Scrappy1111  
**Subject:** Re: [EXTERNAL] Fwd: EIS Draft For Keauhou Bay  
**Categories:** Yellow Category

Aloha e Marie,

Thank you for your comments concerning the Keauhou Bay Management Plan, Draft Environmental Impact Statement. Your comments have been received and administratively recorded.

Comments received during the 45-day public comment period will be reproduced in the Final Environmental Impact Statement, and substantive comments addressed.

Since you also provided a copy to the County of Hawaii and our planning consultant, G70, we will not be forwarding them a duplicate copy.

We appreciate your involvement and contribution to the environmental review process. Your input is invaluable in helping us develop a management plan that reflects the needs and concerns of our community.

Thank you once again for your engagement and commitment to the future of Keauhou Bay.

Mahalo,

The Keauhou Bay Project Team

**From:** Mademoiselle Scrappy1111 <[REDACTED]>  
**Sent:** Tuesday, August 6, 2024 11:51 PM  
**To:** Alex.Roy@hawaiicounty.gov <Alex.Roy@hawaiicounty.gov>; Planning@hawaiicounty.gov <Planning@hawaiicounty.gov>; keauhoubay <keauhoubay@ksbe.edu>  
**Subject:** [EXTERNAL] Fwd: EIS Draft For Keauhou Bay

**CAUTION: This email is from an outside sender. Do not click on links or open attachments unless you recognize the sender, and know the content is safe.**

Aloha,

Please **reject Kamehameha Schools Bungalow Resort project.**

Firstly, please, do not risk **polluting the water in Keauhou Bay** by allowing development. It is a proven fact that developments always pollute nearby waters due to constant runoff (especially during heavy rain or storms). An article by NOAA entitled, "What is the biggest source of pollution in the ocean?" states "... **this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides.**" It also states **"Eighty percent of pollution to the**

**marine environment comes from the land. One of the biggest sources is called non-point source pollution which occurs as a result of runoff."**

Also, **cutting the trees down** will automatically change this small, yet **very important eco-system**. This would allow the **runoff pollution from the golf course easy access to the Bay**. According to the National Library of Medicine, in their article, **Putting the Earth in Play: Environmental Awareness and Sports**, it says that "the golf industry uses **approximately 50 pesticide active ingredients**", all of which are **toxic and detrimental to near shore waters and their inhabitants**.

And most importantly, for me, is the **marine life that will be threatened**, not only by the excess pollution but by the sheer number of people- normally not there- that would be using the Bay. **Keauhou Bay is a monk seal and green sea turtle habitat**. More pollution and people will **further endanger these (already endangered) animals, not to mention the toxicity to the reef and fish**.

I'm not quite sure I understand how a resort here could be culturally helpful. The eco-system of the Bay would change forever (and not for the better). Seems to me to be nothing more than a way to make money. Can't they find a less intrusive place to develop?

Mahalo Nui for your consideration to my viewpoints.

**Marie Le Boeuf** \* (Kilhei, Hawaii) \* [REDACTED]

**Filmmaker/ Producer- "Oasis of the Pacific: Time is Running Out" -2005**

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## Marlies Lee

Instead of building new hotels, we should take care of local people to make sure they have everything they need before we cater to more tourists. Do we have enough resources? We don't have enough hotel rooms?

Make a food farm instead, so we don't rely on the mainland. We should focus on remodeling existing places and not disturb precious historic land. And locals deserve more than WORKFORCE housing, no balcony, just so minimal, I despise the word WORKFORCE!!!

Build low income housing with gardens and balconies, do something meaningful for Hawaiians. Thank you

## Brianna Leever

aloha, i am writing today as a concerned resident in kona. There is no question that there is substantial data to show the negative and ongoing effects of a golf course and development on the marine life- our most valuable and precious resource here on hawaii island. there are many ways that the community can create important income streams for the kamehameha schools, especially on land already owned. one such idea i propose is creating camping spots and charging for permits on land that is already fit for camping. sites like hipcamp allow you to easily monetize existing spaces to charge guests for camping and making enjoyment of the outdoors available now and for years to come. i implore you to please consider the long term impact of such a selfish decision, not just for the aina, but for the people for generations to come.

**From:** Sandra Lee <[REDACTED]>  
**Sent:** Tuesday, August 6, 2024, 7:12 AM  
**To:** 221053-01 KS Keahou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; KeahouBay@ksbe.edu  
**Subject:** Keahou Bay On Big Island

**Categories:** Green Category

To whom it may concern,

Please reject Kamehameha Schools EIS for Keahou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keahou Bay.

Please, Do NOT risk polluting the water in Keahou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "*What is the biggest source of pollution in the ocean?*" by NOAA, National Oceanic and Atmospheric Administration, states, "*When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides.*" It also states, "*Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff.*"

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "*Putting the Earth in Play: Environmental Awareness and Sports*," shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keahou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endangered these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,  
Sandra Vacchio

Sent from my iPhone

**Cody Winchester**

**From:** Brianna Leevever <[REDACTED]>  
**Sent:** Sunday, August 4, 2024 1:40 PM  
**To:** 221053-01 KS Keaouhou Entitlements; Alex.Roy@hawaiicounty.gov;  
Planning@hawaiicounty.gov; KeaouhouBay@ksbe.edu  
**Subject:** Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT

**Categories:** Yellow Category

aloha,

i am writing today as a concerned resident in kona. There is no question that there is substantial data to show the negative and ongoing effects of a golf course and development on the marine life- our most valuable and precious resource here on hawaii island.

there are many ways that the community can create important income streams for the kamehameha schools, especially on land already owned.

one such idea i propose is creating camping spots and charging for permits on land that is already fit for camping. sites like hipcamp allow you to easily monetize existing spaces to charge guests for camping and making enjoyment of the outdoors available now and for years to come.

i implore you to please consider the long term impact of such a selfish decision, not just for the aina, but for the people for generations to come.

mahalo,  
Bri Leevever

**From:** keaouhoubay <keaouhoubay@ksbe.edu>  
**Sent:** Monday, August 5, 2024 8:25 AM  
**To:** Veronique Leferink  
**Cc:** 221053-01 KS Keaouhou Entitlements; planning@hawaiicounty.gov  
**Subject:** Re: Kamehameha Schools EIS Draft For Keaouhou Bay

**Categories:** Yellow Category

Aloha e Veronique,

Thank you for your comments concerning the Keaouhou Bay Management Plan, Draft Environmental Impact Statement. Your comments have been received and administratively recorded.

Comments received during the 45-day public comment period will be reproduced in the Final Environmental Impact Statement, and substantive comments addressed.

The County of Hawai'i and our planning consultant, G70, are copied here on this email so that they receive a copy of your feedback.

We appreciate your involvement and contribution to the environmental review process. Your input is invaluable in helping us develop a management plan that reflects the needs and concerns of our community.

Thank you once again for your engagement and commitment to the future of Keaouhou Bay.

Mahalo,

The Keaouhou Bay Project Team

**From:** Veronique Leferink <[REDACTED]>  
**Sent:** Saturday, August 3, 2024 6:06 PM  
**To:** KeaouhouBay@g70.design <KeaouhouBay@g70.design>  
**Subject:** [EXTERNAL] Kamehameha Schools EIS Draft For Keaouhou Bay

**CAUTION: This email is from an outside sender. Do not click on links or open attachments unless you recognize the sender and know the content is safe.**

To whom it may concern,

Please reject Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keaouhou Bay.

Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "*What is the biggest source of pollution in the ocean?*" by NOAA, *National Oceanic and Atmospheric Administration*, states, "*When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides.*" It also states, "*Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called nonpoint source pollution, which occurs as a result of runoff.*"

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "*Putting the Earth in Play: Environmental Awareness and Sports*," shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keaouhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endanger these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,  
Veronique Leferink

This message is the property of Kamehameha Schools and any attachments are confidential to the intended recipient at the e-mail address to which it has been addressed. If you are not the intended recipient, you may not copy, forward, disclose or use any part of this message or its attachments. If you received this transmission in error please notify the sender immediately by e-mail or contact Kamehameha Schools at webmaster@ksbe.edu and then delete this message from your system.

## Kana Leohano

Aloha to Decision-makers,

It is critical that the EIS and, ultimately, the building project it represents be rejected. Kamehameha Schools claims to be living with Aloha and caring for the 'Aina? A me Ke Kai?? It is preposterous to add 105 hotel rooms with accompanying traffic to this tiny side street. Perhaps even worse is the proposal to cut down a huge number of trees that protect Keaouhou Bay by filtering rain running off the land which often includes golf course chemicals.

Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop this "bungalow resort" project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near-coastal development area. An article entitled, "*What is the biggest source of pollution in the ocean?*" by NOAA, *National Oceanic and Atmospheric Administration*, states, "*When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides.*" It also states, "*Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called 'nonpoint source pollution', which occurs as a result of runoff.*"

According to the National Library of Medicine, in their article, "*Putting the Earth in Play: Environmental Awareness and Sports*," the golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are being held off from running into the Bay by the trees that would be destroyed and removed if this project were to be allowed.

Let's not forget the marine life that would be threatened by excess pollution and traffic. Keaouhou Bay is habitat for monk seals and green sea turtles. More pollution and people would endanger these loved animals.

Keaouhou Bay is worth protecting. People catch fish there. I love to swim there. The Canoe club puts-in there. Please do not put a resort in such a small area. Future generations would be deprived.

If destroyed, it would not be restorable.

With Aloha a me ha'a ha'a,  
Kana Leohano

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**Cody Winchester**

**From:** kanaloaleohano [REDACTED]  
**Sent:** Thursday, August 8, 2024 12:02 AM  
**To:** 221053-01 KS Keaouhou Entitlements; Alex.Roy@hawaiicounty.gov;  
Planning@hawaiicounty.gov; Keaouhoubay@ksbe.edu  
**Subject:** Keaouhou Bay

**Categories:** Yellow Category

[KeaouhouBay@g70.design](mailto:KeaouhouBay@g70.design)  
[Alex.Roy@hawaiicounty.gov](mailto:Alex.Roy@hawaiicounty.gov)  
[Planning@hawaiicounty.gov](mailto:Planning@hawaiicounty.gov)  
[Keaouhoubay@ksbe.edu](mailto:Keaouhoubay@ksbe.edu)

Aloha to Decision-makers,

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Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop this "bungalow resort" project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near-coastal development area. An article entitled, "*What is the biggest source of pollution in the ocean?*" by NOAA, *National Oceanic and Atmospheric Administration*, states, "*When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides.*" It also states, "*Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called 'nonpoint source pollution', which occurs as a result of runoff.*"

According to the National Library of Medicine, in their article, "*Putting the Earth in Play: Environmental Awareness and Sports*," the golf industry uses [approximately 50 pesticide active ingredients](#), including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the trees that would be destroyed and removed if this project were to be allowed.

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Keaouhou Bay is worth protecting. People catch fish there. I love to swim there. The Canoe club puts-in there. Please do not put a resort in such a small area. Future generations would be deprived.

If destroyed, it would not be restorable.

With Aloha a me ha'a ha'a,  
Kana Leohano

**Brian Liddy**

More development is not needed saving nature as nature had intended the lands to be used is what we should be concentrating on please no more resorts

**Jim Lisy**

I have been able to download the KBMP DEIS volumes I and II, but the EISPN will not download (it hangs up after just ~ 140kb of the 6+ mb file. Two of the images:  
[https://www.ksbe.edu/assets/pdfs/KB\\_Mgmt\\_Plan\\_Brochure\\_2024-05-16.pdf](https://www.ksbe.edu/assets/pdfs/KB_Mgmt_Plan_Brochure_2024-05-16.pdf) and Keauhou Bay Management Plan Detail Concepts 2021, are of such low resolution that they can't be read when expanded. Could you please correct these problems so that one can effectively comment on the EISPN and view the supporting images? Aloha and mahalo, Jim Lisy

Clare Loprinzi

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**From:** Email Service <[REDACTED]>  
**Sent:** Monday, August 5, 2024 8:42 AM  
**To:** 221053-01 KS Keauhou Entitlements  
**Subject:** Keauhou EIS  
**Attachments:** Keauhou EIS PLAN 2024.docx  
**Categories:** Yellow Category

Aloha

Attached is my comments for EIS.  
Mahalo

Clare Loprinzi

August 5, 2024  
Clare Loprinzi, Indigenous Practitioner

Kamehameha Schools: Kawaiha`o Plaza  
Marissa Harman  
Keaauhobay@ksbc.edu

G70  
Kawika McKeague  
Keaauhobay@g70.design

County of Hawaii,  
Planning Department  
Alex Roy  
Alex.Roy@Hawaiicounty.gov

**RE: Comment Period for Keaauhau Bay Management Plan Draft EIS**

**For the record I am quoting from the American Declaration on the Rights of Indigenous Peoples (2016) ▼ Article XI.**

**Protection against genocide .** Indigenous peoples have the right not to be the object of any form of genocide or attempts to exterminate them.

It is Our Human Right, Our Constitutional Right and Our Right as Indigenous People to be self-determined, to freely determine our political status, to freely pursue our economic, social, and cultural development as a community. (Partial quote from American Rights of Indigenous Peoples)

Aloha Kakou

O Clare kou Inoa. Noho au Honokohauiki, Mokuokeawe. I am an Indigenous Practitioner of over 50 years, working with Customary Traditional and Cultural Practices, last thirty years with Hawaiian lineal Descendants. There are at least 20 SHP sites and hundreds of burials which you all should be aware of in this “ Keaauhau Bay Management Draft EIS.”

***In Hawaiian thinking sustainability is where and what we come from and instead of creating it, we are returning to it. This is the approach with our na keiki, to become green and sustainable. This testimony is in regard to the Keaauhau Bay Management Plan Draft of EIS.***

The Kona Field System, is part of the Keaauhau ahupuaa and essential to “Native Hawaiian rights HRNS 7-1. Protect water rights and Act 50 states....need to clarify that the preparation of environments assessments or environmental impact statement should identify and address effects on Hawaii’s culture and traditional and customary rights. (HB No.2060). I was honored from 2000-2015 to help bring back this Native Hawaiian cultural traditional practice at Ka Mala o Ehuuikaimalino.

**Article XII, Section 7 of the Hawai’i Constitution** obligates the State Land Use Commission (LUC) to protect the reasonable exercise of customarily and traditionally exercised rights of native Hawaiians to the extent feasible when granting a petition for reclassification of district boundaries. In order to effectuate the State’s obligation to protect native Hawaiian customary and traditional practices while reasonably accommodating competing private interests, the Hawai’i Supreme provided the following analytical framework as an outcome of Ka Pa ‘akai O Ka ‘a/ha v. Land Use Commission (94 Hawai’i 3], 7 P.3d 1068, September 1], 2000.).

**Section 711**

**711-1107 deals more generally with all acts of desecration; i.e., acts of physical damage to or mistreatment of venerated places and objects under. In a public place the national flag or any other object of veneration by a substantial segment of the public.**

The Native inhabitants of Hawaii prior to 1778 Ahupuaa has kuleana to protect their iwi kupuna, sacred sites that still keep them connected to their lands.

**Act 50, enacted by the Legislature of the State of Hawaii (2000) with House Bill 2895, relating to Environmental Impact Statements, proposes that...there is a need to clarify that the preparation of environmental assessment or environmental impact statement should identify and address effects on Hawaii’s culture, and traditional and customary rights...[H.B. NO. 2895]**

**You all have kuleana that needs to protect this land which connects our native peoples to what is sacred to them, to feed them physically, mentally and spiritually, essential to live.**

Me ka haahaa,



Clare Loprinzi, Indigenous Practitioner

Please, DO NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is **scientifically proven** that developments pollute nearby waters both **during and after development**.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have **ALWAYS** polluted the water in **EVERY** coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keauhou Bay is their habitat and this development **WILL** be **CHANGING** an Entire Ecosystem.

**ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT**

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keauhou Bay.

The Green Sea Turtle swims in Keauhou Bay weekly and the monk seal has also been seen swimming and resting in Keauhou Bay. Both of these marine animals are on the endangered species list.

**Endangered Species Act**

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) **PURPOSES**.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-act>

**FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED**

The green sea turtle is federally protected and can be seen in Keauhou Bay weekly.

The following article that states: **"POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"**

**Why does Hawaii have a runoff problem?**

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way

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**From:** keauhoubay <keauhoubay@ksbe.edu>  
**Sent:** Tuesday, July 30, 2024 4:34 PM  
**To:** Jenni Lund  
**Cc:** 221053-01 KS Keauhou Entitlements; Alex.Roy@hawaicounty.gov  
**Subject:** RE: [EXTERNAL] Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT!

Yellow Category

Aloha e Jenni -

Thank you for your comments concerning the Keauhou Bay Management Plan, Draft Environmental Impact Statement. Your comments have been received and administratively recorded.

Comments received during the 45-day public comment period will be reproduced in the Final Environmental Impact Statement, and substantive comments addressed.

Your feedback will be forwarded to the County of Hawai'i and our planning consultant, G70; they are copied here.

We appreciate your involvement and contribution to the environmental review process. Your input is invaluable in helping us develop a management plan that reflects the needs and concerns of our community.

Thank you once again for your engagement and commitment to the future of Keauhou Bay.

Mahalo,

The Keauhou Bay Project Team

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**From:** Jenni Lund <[REDACTED]>  
**Sent:** Saturday, July 20, 2024 5:32 AM  
**To:** keauhoubay <keauhoubay@ksbe.edu>  
**Subject:** [EXTERNAL] Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT!

**CAUTION: This email is from an outside sender. Do not click on links or open attachments unless you recognize the sender and know the content is safe.**

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keauhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keauhou Bay as stated in all the different researched articles below.

to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

**Allowing this development WILL POLLUTE Keauhou Bay.** The above article, written in 2014 (because runoff water from developments was polluting the ocean even then!!) states this fact clearly. Keauhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

### THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keauhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

**Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keauhou Bay will likely be changed forever.**

This information is from a NOAA Scientist: "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie!'" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

**Keauhou Bay is the monk seals and the green sea turtle's habitat.** Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. **By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.**

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keauhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

**Does this EIS have any reports on the endangered species that frequent Keauhou Bay? This is their habitat and it needs to be "conserved".**

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§ 195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project.

### GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#%3A~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#%3A~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will absorb a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where the Hawai'i government states that **Natural Ground Cover has 10% runoff, where has development has 55% runoff.**

**These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.**

Under Section 2 (b) of the Endangered Species Act - **Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species.** It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

#### **ALGAE BLOOMS KILL CORAL AND MARINE LIFE**

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

**Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.**

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course development. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

**Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?**

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution. . . <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAHOUBAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

**Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?**

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

**FURTHERMORE:** "If there are [toxic algal blooms](#), like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

#### **ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN**

**Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?**

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

**The article below is from NOAA regarding motor vehicle engines and pollution to the sea.**

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20or%20soil%20from%20fields%20or%20construction%20sites,Dir%20soil%20or%20silt%20from%20fields%20or%20construction%20sites%20can%20run%20off%20into%20waterways%20harming%20fish%20and%20wildlife%20habitats%20.>

**Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects**

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a [new report](#) from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution.

The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/01-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20says%20a%20new>

### **The Impact Of Stormwater – Car Emissions**

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershepherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

### **NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE**

**Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keaouhou Bay during development?**

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

### **How Does Noise Pollution Harm Marine Species?**

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dhr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

### **What is ocean noise?**

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

### **LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS**

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is **a lot bigger** than Keaouhou Bay. If it's being drastically hurt by runoff water from developments, Keaouhou Bay waters won't stand a chance if development above the bay is allowed. Keaouhou Bay is a much smaller ecosystem.

**This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states,** "...runoff is a significant source of harmful nitrogen pollution that continues to grow ...

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keaouhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keaouhou Bay due to its size and fragility.



**change.** Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem...

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. **This occurred in a relatively short time considering that the experiment lasted less than three weeks.** The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-*a* concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

**The ecosystem is fragile and interconnected as is stated in this article:** "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses "Toxic Effects of Pollutants on Plankton: **There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage.** Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The mania ray food source will likely disappear. This will be devastating for the mania ray populations. Furthermore, if mania rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the mania ray tour for their income.

## HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

**Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?**

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than

6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: **The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life.**" <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

**Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.**

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC., from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development/#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. **Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it.** Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20bare,effect%20on%20nearshore%20fish%20populations.>

## It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. **"Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs.** Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information

PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denster%20coastal%20populations%20and%20greater,te%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, **"This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found.** The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in *Nature Sustainability*." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858&:text=The%20less%20people%20at%20a,there%20are%20C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%20C%20a%20new%20study%20said.>

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

**"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction.** Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20all,viat%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, **"Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity.** By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaHjJAjAWAq453RgN0jAJWv9jnr3Z0Tv0PyGzA5lc\\_H00JzeHNIP3ASnhc\\_gKRy6\\_vKLPw49dbmBYoXSg3YJMG0IGBZsapdGUH70ISLbu9x5P3xED4KxI4T0sJlvgQIa72ZRtRtUbraxp0dId2AoNlSmW.SuxB7JHEDqJ80CJpx71TJWdCFXvFKJZYeNdelj3Sw\\_dnaUe5IzhejPBDlmmaH15vqT5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaHjJAjAWAq453RgN0jAJWv9jnr3Z0Tv0PyGzA5lc_H00JzeHNIP3ASnhc_gKRy6_vKLPw49dbmBYoXSg3YJMG0IGBZsapdGUH70ISLbu9x5P3xED4KxI4T0sJlvgQIa72ZRtRtUbraxp0dId2AoNlSmW.SuxB7JHEDqJ80CJpx71TJWdCFXvFKJZYeNdelj3Sw_dnaUe5IzhejPBDlmmaH15vqT5Q%3D&tracking_referrer=abcnews.go.com)

### INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

**Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?**

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Villages, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

**Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?**

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. **Worldwide, hotels produce almost 300,000 tonnes of waste each year.**" <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keaou Bay. On Hawaii Island, we are already struggling to meet the increasing need for resources and infrastructure.

### Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill

September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

### A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill

By Megan Moseley, September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste,

metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste.”

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

### **Time’s Up For Landfills**

‘Gentle’ demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawai‘i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn’t want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

### **Drought Conditions On Hawai‘i Island Prompt Water Supply Message**

by Big Island Video News  
on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawai‘i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai‘i island is under “Moderate Drought” conditions, according to the latest information [from the U.S. Drought Monitor](#). There is an area under “Abnormally Dry” conditions in South Kona, however there are other, small pockets on the Big Island that are under “Severe Drought”. There is even a small spot of “Extreme Drought” in the South Point area of Ka‘ū.

“The National Weather Service’s forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event,” reported the Hawai‘i County Department of Water Supply. “Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024.”

### **From a Water Supply news release:**

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawai%CA%BBi-island-prompt-water-supply-message/>

[U.S.](#)

### **Hawaii is “on the verge of a greater catastrophe,” locals say, as water crisis continues**

By [Li Cohen](#)

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to [significant droughts](#), and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the [world’s largest surfing wave pool](#) opened up on the island — filled with freshwater.

“They’re not using it to drink or to support life, they’re using it to make money. They’re commodifying it,” said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O‘āhu Water Protectors. “... We are on the verge of a greater catastrophe.”

“**We are in a water crisis, that has to be made very clear.**” Wayne Tanaka, director of Sierra Club of Hawai‘i, told CBS News, saying that if the reasons for this crisis aren’t soon addressed, “We may come to a point where we have to decide ... who gets water and who doesn’t.”

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

### **UPDATE: HELCO asks for continued energy conservation**

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawai‘i Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

“We’re grateful for our customers’ efforts to conserve electricity, especially between 5 to 9 p.m., when electricity us is highest, because it does make a difference,” said Hawaiian Electric spokesperson Kristen Okinaka. “By working together, we’re helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages.”

**Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawai‘i Island because of the unavailability of several generators and lower than normal wind and solar resources.**

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the

amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

### **Big power supply problems continue to plague Hawaii Island**

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

**The company explained that it faces an "extremely tight" supply of power at peak use periods**, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

### **Hawaii Island customers urged to reduce electricity use through April**

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

**-If there is not enough electricity to meet demand**, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

### **FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES**

#### **A Resort Development Will Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?**

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars. The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawai'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths. The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "**Hawaii Island has most traffic fatalities in state**. This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

**"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here,"** he added. "<https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

#### **The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.**

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an [emergency order](#) shutting down Waipio Valley Road due to overuse and poor prior

-Of all the crash fatalities, most were males between 20 to 24-years old.

“That’s just Big Island traffic,” is a common sentiment. But what if we didn’t have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?”

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

## **MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC AND WASTEWATER:**

### **1) Hawaii Deals with Burgeoning Waste Management Problem**

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

“Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.” <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

### **2) "Big Island Now readers seem to agree that there’s likely no single solution for slowing down the timeline of the West Hawai’i Sanitary Landfill reaching capacity.**

The West Hawai’i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.” <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

### **3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste**

Hawai’i Public Radio Published January 9, 2020 at 5:00 AM HST

“Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona.” <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

### **4)“What happens to Hawaii Island’s trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17**

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support.” <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

### **5) “The overwhelming plastic waste Hawaii visitors leave behind**

By Natasha Bourlin Aug 24, 2023

maintenance.” This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: **All of these roads only have two lanes!**

There are two developments already on Alii Drive being built as of today, and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: “Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution.” [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=-FQSanPDji8>

**Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.**

### **Read this Path article, HAWAII COUNTY’S VISION ZERO INITIATIVE:**

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawai’i Island...

Here are some other statistics that are even more staggering:

- 28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees
- 13% of pedestrians hit at 20 mph actually suffer fatality
- 73% of pedestrians hit at 40 mph suffer fatality
- 25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!
- 56% of fatal crashes were the result of alcohol or drugs
- 41% of fatal crashes occurred in light trucks and vans
- 49% of crashes occur during the day, outside of peak traffic hours

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

**6) "A County commission drafts ordinance aiming to ban recyclables at West Hawaii'i landfill** By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawaii'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

**7) "Hawaii'i County issues mandatory 25% water restriction** for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

**8) "Hawaii'i Water Supply Closely Monitored As Severe Drought** Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm. STORY SUMMARY

HAWAII'I COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca-bbi-under-severe-drought/>

**9) "Big Island Concerns About Water Quality** Prompt A Lawsuit Over A Kona Sewage Plant Kealahehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

**10) "Researchers find sewage from an oceanfront** Big Island community reaches nearshore waters Hawaii'i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii'i Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

**11) "Kona coast faces stark wastewater tradeoffs.** Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

**12) "HELCO restores power after initiating emergency outages** on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

**13) Hawaii'i State News Update: Hawaiian Electric initiates** rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

**14) HELCO issues rolling power outages around Big Island** by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

**15) "Here's how power outages can have repercussions** for Hawaii'i's water supply Hawaii'i Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii'i Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii'i's power system from its water system, said Kawika Uyebara, deputy director of Hawaii'i County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-serve-water-amid-power-outages>

**16) US Hawaii is "on the verge of a greater catastrophe,**" locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is ola i ka wai, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

**17) News Hawaii'i County issues mandatory 25% water restriction** for North Kona August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

### 18) **Hawai'i Water Supply Closely Monitored As Severe Drought Continues**

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBj-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

### 19) **"Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."**

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/?rdt=52660)

### 20) **"Hawaiian Electric asking Big Island customers to conserve power due to down generators**

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

## **HISTORICAL AND CULTURAL SIGNIFICANCE:**

### **The Law of the Splintered Paddle**

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānawai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, **the law is part of Hawaii's State Constitution today.**

It is symbolic of servant leadership, reinforcing the importance of:

-Caring for and serving one's people

-Knowing and doing what is pono (right)

-Standing for the principle that leadership privilege is earned

-Taking kuleana (responsibility) for those we serve

-Doing so with compassion, love, and respect

**"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."**

**The Law of the Splintered Paddle is also on Kamehameha Schools website.** The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

**Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.**

## **IN CONCLUSION**

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that adding another development is going to cause devastating, lasting, effects on the Eco-system at Keauhou Bay.

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other.

In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved.



## Sylvie Madison

I strongly oppose any development that will have a detrimental effect on the bay and its fragile ecosystem. Also it is shameful that a hotel is being planned to be built there.

From the testimony of Richard Bennet, MS, Phd:

Keaouhou Bay is a small bay inlet on Hawai'i Island and, as such, is subject to much more degradation than the open shore area of West Hawai'i. As such, the Bay requires special protections.

The following comments pertain specifically to water quality issues affecting Keaouhou Bay. The draft EIS does not address these nor accounts for the fact that the State and the EPA list Keaouhou Bay as an Impaired Water Body under section 303 D of the Clean Water Act (CWA). That law requires that impacts to the Bay be mitigated and that further impairment does not occur. This requirement under the law has not been met. Any development in the watershed needs to be conducted by a careful evaluation of this fact. Under the law, remediation begins by conducting a Total, Maximum Daily Loading study known as a TMDL. The Bay is listed as impaired for exceeding the limits for turbidity. Turbidity has several causes in near-shore waters, such as runoff water with fine sediments and phytoplankton. Our research shows that turbidity is a problem in Keaouhou Bay in the absence of surf events. The turbidity is also due to the overgrowth of marine phytoplankton. Our studies show that turbidity declines along a line moving offshore. The inner Bay has very poor circulation and is where most sediments and other factors causing turbidity arise. Phytoplankton grow in response to increased temperature and nutrient loading in the Bay. The lack of adequate circulation amplifies the problem.

Sylvie Madison

## Michele Makai

The manta ray population in this area is rare and an experience sought after by wonderful people all over the world. Don't f\*ck it up! FYI Watch the movie MILKED by James Cameron to further understand how easily the quality of drinking water can be affected on islands <https://milked.film/>

The manta ray population in this area is rare and an experience sought after by wonderful people all over the world. Don't f\*ck it up!  
*Fyi Watch the movie MILKED by James Cameron to further understand how easily the quality of drinking water can be affected on islands <https://milked.film/>*

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**From:** keauhoubay <keauhoubay@ksbe.edu>  
**Sent:** Tuesday, August 6, 2024 10:46 AM  
**To:** Michele Makai  
**Cc:** 221053-01 KS Keauhou Entitlements; planning@hawaiicounty.gov  
**Subject:** Re: [EXTERNAL] For the ocean and the manta rays, Zendo Kern Please OPPOSE Keauhou Bay Bungalow Resort because it WILL CAUSE SERIOUS NEGATIVE IMPACTThe manta ray population in this area is rare and an experience sought after by wonderful people all over...  
Yellow Category

Aloha e Michele,

Thank you for your comments concerning the Keauhou Bay Management Plan, Draft Environmental Impact Statement. Your comments have been received and administratively recorded.

Comments received during the 45-day public comment period will be reproduced in the Final Environmental Impact Statement, and substantive comments addressed.

The County of Hawai'i and our planning consultant, G70, are copied here on this email so that they receive a copy of your feedback.

We appreciate your involvement and contribution to the environmental review process. Your input is invaluable in helping us develop a management plan that reflects the needs and concerns of our community.

Thank you once again for your engagement and commitment to the future of Keauhou Bay.

Mahalo,

The Keauhou Bay Project Team

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**From:** Michele Makai <[REDACTED]>  
**Sent:** Monday, August 5, 2024 6:40 AM  
**To:** Michele Makai <[REDACTED]>  
**Subject:** [EXTERNAL] For the ocean and the manta rays, Zendo Kern Please OPPOSE Keauhou Bay Bungalow Resort because it WILL CAUSE SERIOUS NEGATIVE IMPACTThe manta ray population in this area is rare and an experience sought after by wonderful people all over the...

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## Michele Makai

The manta ray population in this area is rare and an experience sought after by wonderful people all over the world. Don't f\*ck it up!

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**From:** Michele Makai <[REDACTED]>  
**Sent:** Sunday, August 4, 2024 6:33 PM  
**To:** Michele Makai  
**Subject:** for the Manta Rays, Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT

**Categories:** Yellow Category

The manta ray population in this area is rare and an experience sought after by wonderful people all over the world. Don't f\*ck it up!

## Michele Makai

The manta ray population in this area is rare and an experience sought after by wonderful people all over the world. Don't f\*ck it up!  
Fyi Watch the movie MILKED by James Cameron to further understand how easily the quality of drinking water can be affected on islands-- <https://milked.film/>  
THAT is education!

## Michelle Makai

The manta ray population in this area is rare and an experience sought after by wonderful people all over the world. Don't fuck it up!

Aloha nui –

Mahalo for the opportunity to provide comments on the Draft Environmental Impact Statement for the Keauhou Bay Management Plan. My name is Lilie Makaila. I would like to take a paragraph or two to make clear my interest in this plan, kuleana to this wahi pana and my concerns for the future of Keauhou.

I do not live in Keauhou, but I am a lineal descendant of Keauhou ahupua'a, specifically to the pāhale of Keauhou Bay. My 'ohana are the Ha'ani'os and the Ka'imihanas. Your Figure 4-5 depicts the 'āina of my 'ohana who was living there through the 1950's. My ancestor Ka'aha 'āinaakahaku Nāihe (nee Ka'imihana) lived to be over 100 years old, traveled much, and always called Keauhou her home. An article in the Star-Bulletin from 1930 published a photo of my late kūpuna and called her the "Oldest Traveler" at 104. She would holoholo between Big Island and O'ahu on the steamboats, and she often shared of the healing waters of Keauhou and how she swam there in her youth and as a centurian. She was a well-known lā'au lapa'au who is credited with saving the life of C. Montague Cook as an infant. She is featured in a photo at the Bishop Museum where she is practicing ulana lauhala, a practice that was passed down through many generations of my 'ohana on both the Ka'imihana and Ha'ani'o lines. Helen Roberts, during her fieldwork for the Hawaiian Legend and Folklore Commission (1923-1924), recorded four unpublished mele for Ke Ali'iwahine Kap'i'olani dictated to her by my kūpuna Ka'aha 'āina. She passed in 1942. The Star-Bulletin claimed she was the oldest person in Hawai'i at the time, thought to be 116 or even as old as 119. She raised many keiki at Keauhou, including my Tūtū's Tūrūman, Kahaleamiani Ka'imihana. He was known as the blind fisherman of Keauhou. He would lead boats out to lay net and surround the schools of 'ōpēlu and akule along the coastline. He raised his children there, including my Tūtū's mother, Rachel Lāhela Ka'imihana and instilled the importance of Keauhou in subsequent generations. 'Ike that was passed down to me as well.

Now that I feel like I have appropriately shared my kuleana to Keauhou, I will keep my comments organized and concise:

- **I am in support of the heritage corridors, open space, redevelopment of community and public spaces and access, additional parking, and mālama & conservation of wahi pana at Keauhou.** These efforts are what I consider the kuleana of the landowner, and should have been implemented as a part of appropriate land management and stewardship. The sooner the better on these points.
- **I am not in support of the proposed "low-density, sustainable bungalow" type resort development.** I think the use of the terms "low-density" and "sustainable" are misleading, and only make sense when compared to a potential 745-unit, 7-9 story resort development. However, that comparison is based on the existing resort-zoning, a remnant of a time in Hawai'i when aggressive development rampaged unchecked without consideration of our 'āina or our communities. We have moved on from that, and the development of that type of high-density resorts will be challenged by the people of Hawai'i today, myself included.
- **I am not in support of the proposed Kaimuki Retail/Dining component.** Firstly, just because you have given inoa Hawai'i to the development zones does not make the zones Hawai'i. They are components of a plan, and the use of inoa Hawai'i seems strategic.

Secondly, I do not support commercial development in this special place. The 29-acre site is surrounded by extensive development including commercial and retail spaces. The Keauhou Shopping center is located nearby and is a KS development and source of revenue for the trust. I do not believe that KS needs MORE retail and commercial spaces.

- **I think relocating the existing commercial vendors and adding limited small-scale vendors and kiosks could be appropriate for the space.** If these provide opportunities for local and native businesses, then I would be supportive. If the businesses catered to both the community and visitors, then I would be supportive. I am not supportive of any development that is targeted for visitors only, I am only supportive of development that supports the local and native communities.
- **I do not believe that the alternatives suggested in this Draft EIS are genuinely suggested as potential alternatives.** I believe that each is offered as a strategy to make your proposed development more palatable. And, as a scare tactic saying "Doesn't 172-units sound better than 745-units, cuz we could do that ya know". And it is pushing the narrative that if "we" don't support the proposed development, "worse" could happen. Each of your alternatives suggest maximum development conditions, no lower-density alternatives are included aside from "no action" which suggests that as the landowner, KS will leave things to continue to be unmanaged, including the sacred sites identified. Please include a lower-density alternative. Here is a suggestion: Uncle Bobby Camara commented that instead of 1800 sf bungalows, look at small hale catered to local families and visitors for short-term rentals units. A smaller scale, more simple short-term rental development geared towards local people might have HALF the units, at 86-units. These could be very simple construction and priced at \$100/night with State ID for each guest. This would generate at least \$3M in revenue annually. If the goal is for this area to be self-sufficient and be able to sustain the cost of operation and maintenance, isn't \$3M enough? These types of lower density alternative should have been included.
- **The document suggests that the landowner seeks to ensure that the long-term operation and maintenance does not take from resources meant for its educational spending, but the endowment for the trust is \$14.6B and last year alone the trust spent almost half a billion dollars.** I do not believe that the funds needed to maintain the wahi pana and community spaces even compares to what is already spent by the trust. It is however the kuleana of the landowner to property steward its lands, and these are the costs of doing so.
- **KS owns 364,000 acres across the pae 'āina, and stewardship of those lands is the kuleana of the landowner.** Proposing that \$100M of resort and commercial development is a REQUIREMENT needed to maintain the lands at Keauhou is simply false. And as such, KS should reconsider these components of the proposed development and instead look for less impactful long-term uses that better support the community. Based on your breakdown of costs, instead of the proposed \$124M development, remove the proposed resort and commercial/retail/dining components, save yourself \$100M, and invest \$24M in appropriate stewardship and management of the 'āina at Keauhou.
- **The consultation for this project appears to only be completed to "check a box" and does not meaningfully incorporate the concerns expressed by kūpuna and kama 'āina.**

**DEIS for the Keauhou Bay Management Plan**  
Comment

August 4, 2024

A huge majority of the comments received are from folks who do not support the proposed resort and commercial development and ask for other alternatives that better support the local community. Meaningful consultation means that you will act on the major themes expressed by those you have consulted with and that their mana'o will be used to alter the plan as needed. You have not done this. The incorporation of the "Housing Alternative" is an excellent example of not meaningfully incorporating mana'o of participants. You took their suggestion to look at a housing alternative for local families needing homes, and looked at the highest density development option for housing. Meaningful exploration of the intention of that suggested alternative would have looked at low-density single-family homes or multi-family development at least of similar density to the proposed resort development not looking at the highest possible build out. What a missed opportunity to really listen to those you have consulted and genuinely explore their suggested alternative.

- **In light of the lack of meaningful effort put to potential alternatives, I find this DEIS incomplete and ask that you revise and try again.** Perhaps more consultation would be a good thing, especially since the kipuana who you relied on to complete your CIA have expressed in their comments their lack of support for the proposed resort and commercial development components as well.

**Ho'i hou ka wai i uka o Ao** – these waters are muddled, perhaps you should delve further upstream to find clearer, better waters.

Ola ka 'āina,

Lilitie Makaila

**Jeffrey and Leann Malison**

Aloha: We are residents of the Keauhou Punahale condo development just a short distance away from Keauhou Bay, and we oppose the Keauhou Bay Management Plan as proposed by Kamehameha Schools. The following are our reasons for opposing this plan: The plan calls for the development of a new hotel adjacent to the bay. Such construction will certainly come with increased run-off into the bay, damaging corals, fish and other marine life, especially the well-known local manta population. Keauhou Bay already has one large hotel and numerous other rental housing units adjacent to its shore. The small bay already has a very high level of human use. Adding another hotel to the bay area will greatly increase the level of human use to a point that further damage to the corals and other marine life will be inevitable. The development plan including the re-routing of roads near the bay will greatly increase traffic and traffic congestion in an area that is already heavily trafficked. Such an increase in traffic will decrease the overall quality of living in the area and increase traffic safety concerns and problems. Mahalo for allowing us to express our concerns and opinions on this proposal.

Jeffrey Malison

We are residents of the Keauhou Punahele condo development just a short distance away from Keauhou Bay, and we oppose the Keauhou Bay Management Plan as proposed by Kamehameha Schools. The following are our reasons for opposing this plan:

- The plan calls for the development of a new hotel adjacent to the bay. Such construction will certainly come with increased run-off into the bay, damaging corals, fish and other marine life, especially the well-known local manta population.
- Keauhou Bay already has one large hotel and numerous other rental housing units adjacent to its shore. The small bay already has a very high level of human use. Adding another hotel to the bay area will greatly increase the level of human use to a point that further damage to the corals and other marine life will be inevitable.
- The development plan including the re-routing of roads near the bay will greatly increase traffic and traffic congestion in an area that is already heavily trafficked. Such an increase in traffic will decrease the overall quality of living in the area and increase traffic safety concerns and problems.

Mahalo for allowing us to express our concerns and opinions on this proposal.

---

Cody Winchester

**From:** Ellen Manko <[REDACTED]>  
**Sent:** Saturday, August 3, 2024 8:52 PM  
**To:** Alex.Roy@hawaiicounty.gov; 221053-01 KS Keauhou Entitlements;  
Planning@hawaiicounty.gov; Keauhoubay@ksbe.edu  
Keauhou Bay--NO RESORT!

**Subject:**  
**Categories:** Yellow Category

**Subject:** Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT!

To whom it may concern,

Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keauhou Bay.

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "*What is the biggest source of pollution in the ocean?*" by NOAA, *National Oceanic and Atmospheric Administration*, states, "*When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides.*" It also states, "*Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff.*"

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "*Putting the Earth in Play: Environmental Awareness and Sports*," shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endangered these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,  
Ellen Manko, RN

David Markley

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**From:** [REDACTED]  
**Sent:** Tuesday, August 6, 2024 9:06 PM  
**To:** 221053-01 KS Keauhou Entitlements  
**Cc:** [REDACTED]; alex.roy@hawaiicounty.gov  
**Subject:** Keauhou Bay Management Plan DEIS - Comment Letter  
**Attachments:** Keauhou Bay DEIS Review Letter 08.06.24.pdf  
**Categories:** Red Category, Yellow Category

Mr. McKeague,

Thank you for the opportunity to comment on the Keauhou Bay Management Plan DEIS.

Attached please find my comment letter.

If you have any questions, I welcome you to contact me.

Warm Regards,  
David Markley

August 6, 2024

G70

Attn: Kawika McKeague, AICP  
111 S. King Street, Suite 170  
Honolulu, HI 96813

Sent by email to [KeaouhouBay@g70.design](mailto:KeaouhouBay@g70.design)

Subject: Keaouhou Bay Management Plan DEIS

Dear Mr. McKeague

Thank you for the opportunity to comment on the Keaouhou Bay Management Plan Draft Environmental Impact Statement (DEIS).

My wife and I have owned a condominium unit in the Keaouhou Resort, which we have visited annually.

We commented on the inadequacy of the scoping document in April 20, 2022.

While some of the comments in that letter have been superficially addressed, there remain areas where transportation related impacts have not been adequately or accurately analyzed. Accordingly, the probability of significant adverse impacts due to the proposed development still exists unless there is significant reduction in the scale and character of the proposed action and/or significant increase in tangible mitigation that significantly reduces the impacts of the proposed development. The following is a summary of our initial review and comments.

Impact Area and Impacted Intersections - As noted in our previous comment letter, we strongly believe the impact area analyzed should be expanded to include the intersections of Ali'i Drive at Keaouhou Shopping Center Access, Kamehameha III Road at the Keaouhou Shopping Center access, and Kamehameha III Road at Kuakini Highway at the very least. These are intersections where volumes are higher and the impact of a the project-generate traffic volume increases will have a larger impact.

We request an updated traffic analysis (and other related noise and air quality analyses) to include this expanded study area.

Redistribution of Traffic Volume - The construction of Old Kona Road to connect Kamehameha III Road with Kaliopapa Street will result in a major shift in traffic volume away from Kaliopapa Street to Kamehameha III Road with associated forecasts, safety, noise and air quality impacts. The traffic analysis states the traffic forecasts considered such a redistribution of traffic, but this statement is not supported by the numerical analysis. Consideration of redistribution of volume was limited to the project-generated volumes only but did not reflect the redistribution of existing and non-project growth in traffic volume.

The effect of the proposed through-road connection on future traffic volumes will have a greater impact than the project trip generation. It is reasonable to expect that 65% to 75% of all traffic (current volumes, other non-project traffic volume increases and future traffic from the proposed development) will use Kamehameha III Road to access the proposed project. This is because most of the population density, commercial opportunities, tourist and entertainment destinations, and transportation services are north of the proposed development. This shift in background traffic will significantly erode the residential character of neighborhoods currently relying on Kamehameha III Road as primary access.

We request a revised traffic study that includes a figure showing the 2035 traffic volume forecast with the proposed through road connection but without the proposed development. This would show that 2035 volumes will shift from the existing pattern to a pattern where the majority of the non-project traffic enters and leaves the Keaouhou via Kamehameha III Road.

Safety Analysis - The "Existing Conditions" paragraph on page 4-117 states: "The Project Area is in (a) congested area with a high volume of pedestrian and vehicular traffic. This has resulted in functional hazardous conflicts between pedestrians, bicyclists, and vehicles (cars, buses, delivery trucks, and boat trailers."

This sounds like a demolition derby, yet there is no documentation of existing traffic safety conditions in the traffic analysis, sources of the safety issues, forecast of continuation of the unsafe trend, and/or how such impacts would be mitigated with the proposed development.

One specific example is the conflict between motor vehicle traffic and pedestrians along Kaliopapa Street. It is noted that there is substantial parking along the lower portion of this road where no sidewalks exist. Yet Figure 4-42 – Proposed Circulation, shows this road as a "Vehicles Only" road. The pedestrian paths are nice, but pedestrians who park along Kaliopapa Street will follow the path of least

resistance and will walk along the road as they make their way to and from Keaunohu Bay. There needs to be a sidewalk at least on one side of the road so pedestrians are not forced to walk in the street.

We request documentation of safety impacts in the study area forecast of future conditions with the new through road connection and proposed development, and effective mitigation including sidewalks on both sides of these roads, bike lanes, and traffic calming/speed reduction measures to reduce the frequency and severity of this problem.

**Air Quality and Noise Analysis** – Since the traffic forecasts are erroneous, all air quality and noise analysis are also in error. The noise disruption from traffic along Kamehameha III Road is already disruptive. As noted above, the majority of both background traffic volume and project generated traffic volume will use Kamehameha III Road. Traffic congestion, noise (duration and intensity), and air quality impacts will significantly worsen, particularly for residents adjacent to this section of the road.

We request that Air Quality and Noise studies be revised to reflect the significant shift in traffic volume associated with the development and through road connection that is part of the proposed action.

In summary, we request that a Supplemental DEIS be prepared for public review to address an updated traffic analysis addressing the items noted above, any associated Noise and Air Quality analyses, and other non-traffic issues.

Thank you for considering our request for additional analysis and effective voluntary mitigation. Please respond to our comments as part of your public review process and/or issuance of a Supplemental DEIS by email.

Sincerely,  
David Markley



cc: [rebecca.villegas@hawaiicounty.gov](mailto:rebecca.villegas@hawaiicounty.gov), [alex.roy@hawaiicounty.gov](mailto:alex.roy@hawaiicounty.gov)

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**From:** Heather Masunaga <[REDACTED]>  
**Sent:** Saturday, August 3, 2024 8:13 PM  
**To:** 221053-01 KS Keaouhou Entitlements; Alex.Roy@hawaiicounty.gov; Keaouhoubay@ksbe.edu; Planning@hawaiicounty.gov  
**Subject:** Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT!

Yellow Category

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,

Heather Masunaga

Sent from [Proton Mail](#) for iOS

To whom it may concern,

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Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, *"What is the biggest source of pollution in the ocean?"* by NOAA, National Oceanic and Atmospheric Administration, states, *"When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides."* It also states, *"Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff."*

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, *"Putting the Earth in Play: Environmental Awareness and Sports,"* shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keaouhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endanger these species.

## janet Matlock

Mahalo for this opportunity to review and comment on the Keaouhou Bay DEIS. There are myriad reasons to oppose this plan — including mauka-makai environmental, historical, cultural, economic, and educational to name but a few — but I will focus this letter primarily on what appears to be Kamehameha Schools / Bishop Estate's primary motivator: money.

Section 2.6.2 claims:

"Lands are Underperforming Economically"  
"The Kamehameha Schools properties are prime properties that could generate significant revenues from appropriate development to support the management of Kamehameha Schools assets and provide long-term economic returns. However, these lands are currently underutilized, and do not yield equitable returns or market-based rent revenues for the organization. A key component of the plan is to ensure its economic sustainability. Revenue generated from commercial lease rent will be redirected to support the KBMP's desired educational and cultural resource management priorities..."

This assumption, that Keaouhou Bay is a "prime property that could generate significant revenues," flies directly in the face of section 2.6.1:

"Integrity of Natural and Cultural Resources are Threatened"  
"Cultural resources include the tangible and intangible places and landscapes that our kupuna once lived, worked, played, and passed. For Native Hawaiians, these places provide a spiritual connection to the practices and knowledge of their kupuna (ancestors/elders) and continue to contribute to a sense of identity and well-being..."

It makes no sense to increase commercial development specifically intended to be marketed for high-end tourism in order for this place to provide spiritual connection, unless one is worshipping the almighty dollar.

It is baffling at best that Kamehameha Schools sees this sacred wahi pana first and foremost as a source of income. KS's website states the current endowment is \$14.6 Billion and the investment portfolio is reported at \$9.6 Billion, with the smallest portion of that portfolio being real assets. (see attached file)

How much of a rounding error would the Keaouhou Bay proposed development be? And at what intangible price to the 'āina?

During the April 2022 talk story, one participant asked, "...If the intent is to increase kama'āina and kupu'āina access, why is this being accomplished by putting in hotel rooms and fine dining? What are financial metrics to meet successful mission at Keaouhou Bay. Is it the same for all properties. Could bungalows at another KS owned site be used to provide financial returns needed."

The response was, "KS's objective is to steward the land in perpetuity. There are no existing revenue generating uses at Bay to fund the needed stewardship. We don't want to drain on other endowment funds set aside for education. Acceptable rate of returns have been studied." (sic)

So: KS holds a \$14.6 Billion endowment with a \$9.6 Billion investment portfolio, yet believes it does not have enough money to fund the proposed "educational centers" (and additional commercial developments) proposed for Keaouhou Bay?

This does not make sense. If I had control of this endowment, I would be building more schools and educating more Hawaiian keiki, not causing environmental degradation in order to develop yet another high-end "bungalow" resort.

KS already owns land leased for multiple resort properties, including one on Keaouhou Bay that seems to be "under-performing." Given KSBE's track record with hotels in this ahupua'a, perhaps caretaking the one already on-site might be a better approach?

I would like to close by referencing a submission contained in Appendix B, EISPN Comment Letters, by Alysia Fischer (KS's response was boilerplate):

"As an archaeologist who worked on site in Keaouhou Bay for multiple impact assessment and tsunami mitigation projects, I am vehemently opposed to any development that would add more commercial or residential impact to the area. Along with the uncontrolled sea level rising, any further development would negatively impact the invaluable historical and cultural resources of the area. Kamehameha Schools, the county, and the state can do better with "fundraising" for education and the preservation of this area instead of hiding it within the guise of obtaining the funds through further "for profit" development. Preservation and improvement projects are always welcome and encouraged, but it shouldn't come at the high cost of changing the physical and cultural landscape to this extent."

I completely agree. It is simply not fathomable that KS cannot allocate funds to accomplish appropriate stewardship goals without bulldozing, paving, and commercializing via exclusive tourism this fragile and already-impacted little bay.

Mahalo for your time and attention.

Janet Matlock  
Kai lua Kona



**Peter Matlock**

Mahalo for this opportunity to comment on the Keahou Bay Management Plan Draft Environmental Impact Statement.

Reading this Draft EIS is an exercise in cognitive dissonance. Critical objectives of the KS mission and intent for Keahou Bay are directly undermined by the planned development. Furthermore, it lacks creativity by perpetuating "same old" approaches for Hawai'i economic development, and will further deteriorate the already fragile nature of Keahou Bay and its marine health.

It is important to first recognize the good parts of this plan, and to acknowledge good work done by KS to fulfill Princess Pauahi's will to educate Hawaiian students and preserve Hawaiian culture. Enhancing respectful space around the birthplace of Kaunakouli and other significant cultural sites in historic Keahou Bay is needed.

That said, the current plan does not meet stated KS and project objectives, and is worse than the "No Action Alternative."

Many others will provide additional details on Draft EIS deficiencies. Selected comments are:

1. The Plan claims to increase access to Keahou Bay by Kama'aina and Kupi'aina ("create a greater sense of inclusivity at the bayfront", pg. 1-14), yet development of high-end hotels and commercial activity (which is the essence of this Plan) elsewhere in the Islands has previously and consistently resulted in the exact opposite effect.

Keahou Bay provides one of the few areas for ocean access in Kona and is used heavily by Hawaiians, other locals, visitors, families, churches, community groups, fishermen, swimmers, boaters, paddlers, those on SUPs, kayakers, local volleyball players, and children jumping for hours into the water. There is little confidence these activities will continue if surrounded by high-end hotels, retail, and restaurants. It is difficult to give KS credibility for its claims to help people, when it has for years not fixed its restaurants at the Ka'ilimohie Beach Park—which is the most basic of steps to encourage a "greater sense of inclusivity."

2. The Plan quotes Dr. Konia Freitas, the "noted Native Hawaiian scholar from the Kamakakōkōkalamī Center for Hawaiian Studies, [who] explains spatial legitimacy as a need to respond and challenge certain assumptions that Native Hawaiian values cannot be authenticated in the contemporary urban form. The persistence of these assumptions 'bolsters the colonial construct of indigenous life as incompatible with modernity and cedes the urban realm as a perpetually colonized space' (Koh and Freitas, 2018). Dr. Freitas postulates that planning for places that are inclusive of Native Hawaiian perspectives, in response to these questionable assumptions, must begin through an inclusive framework that goes beyond an aesthetic response but seeks to be 'generative of social, economic, and political meaning.' This KBMP also aims to purposefully pursue the 'Aina Aloha Economic Futures Declaration (AAEF) with a specific focus to 'assess collective kuleana to restore degraded environments, sustainably managed human-occupied spaces, and protect the vibrancy of intact ecosystems.'" (pg. 2-4)

It is admirable that KS seeks to incorporate Hawaiian perspectives and kuleana in management of its spaces, but—frankly—nothing seems to exude colonialism more than high-end luxury hotels and resort retail, and it is difficult to understand how more development, run-off, and pressure on already-stressed Keahou Bay will "protect the vibrancy of intact ecosystems."

3. The Plan asserts "Many consulted parties described commercial activities at the bayfront as incompatible with and disrespectful to the significant cultural landmark. The abundant commercial activity at the bayfront area has also caused a perception of exclusivity that some feel lacks true inclusivity of Native Hawaiian and kama'aina residents to the area. Long-time Keahou residents express the sentiment that the bayfront is too commercialized and the feeling expressed is that many Native Hawaiian families are no longer welcomed. The KBMP is a reinvestment and application of key foundational principles and values that promote an inclusive cultural/community space at Keahou Bay." (pg. 2-9)

If we understand correctly, KS acknowledges that Keahou Bay is currently too commercial, and then asks us to accept that its solution to this is yet MORE commercial activity. This is self-contradictory.

4. The Plan states "The mission of Kamehameha Schools is to create educational opportunities in perpetuity to improve the capability and well-being of people of Hawaiian ancestry. Kamehameha Schools' Vision 2040 seeks to improve the well-being of 'āina (land) and the lāhau (Hawaiian people) within one generation." (pg. 2-2)

This is an eminently laudable objective. With approximately 55% of Native Hawaiians now living outside of the Hawai'i Islands, improving Hawaiian well-being is more critical than ever. However, this Plan fails to address this concern, is itself risky (note history of prior hotels at Kahalu'u), and undermines the intent to improve well-being by holding needed improvements to Keahou cultural/historic sites hostage to development that will seriously degrade Keahou Bay health and public access—with the end result of a net decline in well-being.

5. The consistent underlying theme in this Plan is KS desire for profit. We are asked to accept as an article of faith that revenues from ONLY the Plan's 29.12 acres can be used to support desired renovations and support students in the future, whereas Princess Pauahi's estate currently comprises 363,800 acres and a portfolio valued at \$13.1 billion (https://investments.kshb.edu/history/#:~:text=Today%2C%20her%20heir%20has%20grown,as%20a%20June%202003%2C%20%202022.). This amount of building will cause serious environmental degradation to a bay critical to Hawaiian history and culture—does KS not

have other locations to build its hotel?

6. The Plan shows a lack of creativity by proposing more of the "same old" for economic development. The history of KS hotels in Kahala'u shows two that were ultimately taken down. Building hotels is not without risk. Why not, for example, instead move all boating check-in activities to Keauhou Shopping Center storefronts and bus visitors to the bay (allowing the opportunity for cultural education). This would facilitate construction of cultural venues at the bay, preclude the need for more environmentally damaging development and additional parking along the bay, and increase foot traffic at the under-utilized shopping mall—hence increasing KS revenues from existing infrastructure. It could likely be that this approach has a greater return on investment than a risky hotel development. Or, why not take the bold move of seeking to preserve as much land as possible in an undeveloped state, while restoring Native Hawaiian archeological remains (as is being done in Kahala'u), so that future generations can learn directly from this historically rich area that once featured seven royal centers?

7. When it is said the Plan will "Address the opportunity gap within Kona's existing visitor accommodation inventory" then it is clear that KS is thinking more as a real estate developer than as a steward of Hawaiian education and cultural preservation.

8. Keauhou Bay is already stressed, to the detriment of marine life. Those who use Keauhou Bay know not to enter it with an open cut, which is a sad reversal from when Native Hawaiians and others would seek out ocean saline water to heal wounds. Studies show Keauhou Bay water has high, if not the highest, levels of fecal bacteria along the Kona Coast. We know development and paving over more areas for buildings and parking increases runoff, which causes further water degradation. Increased development under this Plan undermines our ability to rejuvenate a healthy bay, also undermining key relationships among land, ocean, and people.

9. The proposed boat traffic will also undermine bay water quality, and further impede use by all who enjoy non-motor boat use, recreation, and fishing in Keauhou Bay.

There is much more. To repeat: the "No Action Alternative" is the better choice than the proposed Plan.

Mahalo nui loa for this opportunity to provide input.

Peter Matlock

Orion McCarthy

July 30, 2024

To whom it may concern,

Thank you for soliciting public comment on the proposed development at Keaouhou Bay. My name is Dr. Orion McCarthy. I am writing to express my concern about the impact of the proposed development on the nearshore coastal ecosystem within Keaouhou Bay.

I recently received my PhD in marine biology from the Scripps Institution of Oceanography in San Diego, California. Much of my doctoral research focused on the temporal dynamics of coral reefs in Maui Nui, focusing on the human and environmental drivers responsible for reef change over time. In addition, I also attended the UH Marine Option Program's QUEST field school in Ke'ei, Hawaii, where I gained familiarity with Kona's unique reef system, which is characterized by higher reef fish abundance and biomass (Donovan et al. 2018; Jouffray et al. 2019) and large amounts of habitat structural complexity (McCarthy et al. 2022) compared to elsewhere in the Hawaiian Islands.

**Hawaiian coral reefs are culturally, economically, and ecologically important**, and have been identified as hotspots of coral resilience (Sully et al. 2022). However, coral cover in the state of Hawaii has declined over the past few decades (Rodgers et al. 2015; Asner et al. 2022), due in part to chronic impacts from nearshore development. **A recent study focused on coral reefs in Kona found that reefs with healthy fish populations and reduced exposure to wastewater and urban runoff were better able to recover after bleaching events than reefs exposed to elevated land-based impacts** (Gove et al. 2023). This matches other findings from elsewhere in the Pacific (Donovan et al. 2021), which have consistently found a negative impact of elevated nutrients and wastewater on corals, especially as they struggle to adapt to bleaching events and other climate impacts.

I have no issue with the broad concepts underpinning the Keaouhou Bay Management Plan. I celebrate the Kamehameha School's vision for protecting, highlighting, and celebrating Hawaiian culture and heritage as well as promoting coastal access for kama'āina. However, I question whether some aspects of the plan align with this vision, specifically the plan to develop a resort adjacent to Keaouhou Bay. Furthermore, **the draft Environmental Impact Statement (EIS) barely touches on the impact of this development on Keaouhou's coral reefs.**

The EIS mentions the value of Keaouhou's reef, citing coral cover as high as 62% (which is considerably higher than the statewide average; Rodgers et al. 2015), but maintains that impacts to reefs will be minimal because the development will occur only on land. This is shortsighted, because **coral reefs are directly impacted by land-based sources of pollution. Furthermore, the EIS does not propose a convincing plan for dealing with wastewater and stormwater from the proposed development.** The geology of the Big Island is characterized by extremely porous rocks, which allows wastewater and stormwater pumped into dry wells to percolate up onto the reef. This makes Kona's reef especially susceptible to impacts from coastal runoff and wastewater (Gove et al. 2023). Similar upwelling has negatively impacted coral reefs in nearby Maui from the Lahaina Wastewater Reclamation Facility (Williams et al. 2016).

**To ensure the future resilience of Keaouhou Bay's coral reefs, the Keaouhou Bay Management Plan should bolster plans to deal with wastewater and stormwater impacts and reconsider development of the proposed resort at Keaouhou Bay.** On an island with such high housing costs and tourism impacts, it is questionable why a resort is being built here at all, instead of low-income housing reserved for locals and not tourists. Locals are the ones who use and appreciate Keaouhou Bay's coastal resources year-round, and these resources should not be further degraded by development in support of tourism.

Thank you for considering these concerns.

Sincerely,

Dr. Orion McCarthy

## References

- Asner GP, Vaughn NR, Martin RE, Foo SA, Heckler J, Neilson BJ, Gove JM. 2022. Mapped coral mortality and refugia in an archipelago-scale marine heat wave. *Proceedings of the National Academy of Sciences of the United States of America* **119**:1–6.
- Donovan MK, Burkepile DE, Kraitchwill C, Shlesinger T, Sully S, Oliver TA, Hodgson G, Freiwald J, van Woesik R. 2021. Local conditions magnify coral loss after marine heatwaves. *Science* **372**:977–980.
- Donovan MK, Friedlander AM, Lecky J, Jouffray JB, Williams GJ, Wedding LM, Crowder LB, Erickson AL, Graham NAJ, Gove JM, Kappel C V., Karr K, Kittinger JN, Norström A V., Nyström M, Olsson KLL, Stamoulis KA, White C, Williams ID, Selkoe KA. 2018. Combining fish and benthic communities into multiple regimes reveals complex reef dynamics. *Scientific Reports* **8**. Nature Publishing Group.
- Gove JM, Williams GJ, Lecky J, Brown E, Conklin E, Counsell C, Davis G, Donovan MK, Falinski K, Kramer L, Kozar K, Li N, Maynard JA, McCutcheon A, McKenna SA. 2023. Coral reefs benefit from reduced land – sea impacts under ocean warming. *Nature*:1–7. Springer US. Available from <http://dx.doi.org/10.1038/s41586-023-06394-w>.
- Jouffray JB, Wedding LM, Norström A V., Donovan MK, Williams GJ, Crowder LB, Erickson AL, Friedlander AM, Graham NAJ, Gove JM, Kappel C V., Kittinger JN, Lecky J, Olsson KLL, Selkoe KA, White C, Williams ID, Nyström M. 2019. Parsing human and biophysical drivers of coral reef regimes. *Proceedings of the Royal Society B: Biological Sciences* **286**. Royal Society Publishing.
- McCarthy OS, Smith JE, Petrovic V, Sandin SA. 2022. Identifying the drivers of structural complexity on Hawaiian coral reefs. *Marine Ecology Progress Series* **702**:71–86. Inter-Research Science Center. Available from <http://dx.doi.org/10.3354/meps14205>.
- Rodgers KS, Jokiel PL, Brown EK, Hau S, Sparks R. 2015. Over a decade of change in spatial and temporal dynamics of Hawaiian coral reef communities. *Pacific Science* **69**:1–13. Pacific Science.
- Sully S, Hodgson G, van Woesik R. 2022. Present and future bright and dark spots for coral reefs through climate change. *Global Change Biology* **28**:4509–4522.
- Williams ID, White DJ, Sparks RT, Lino KC, Zamzow JP, Kelly ELA, Ramey HL. 2016. Responses of Herbivorous Fishes and Benthos to 6 Years of Protection at the Kahehiki Herbivore Fisheries Management Area, Maui, PloS one **11**:e0159100.

## Peter McCormick

My wife and I own one of only two residential properties on Ehukai St on the south side of Keahou Bay and are the only full-time residents on the south side of Keahou Bay, from the Outrigger all the way around the bay to Kamehameha III Road. We are very happy with the plans for redevelopment and beautification of the area. We do have some requests we are hoping will be considered for actions now, during redevelopment, and once completed. Those are as follows:

1. Most of Ehukai St is already designated by the County and marked as no parking but this is rarely enforced, even when the police are called. Illegal parking creates a safety hazard for pedestrians along this street. In cooperation with the County, please consider adding sidewalks with curbs along both sides of Ehukai St and eliminate all parking along the street.

2. On a daily basis we have people trespass across our property at 78-131 Ehukai St. They came from the shoreline public access area on your property at the Outrigger and from your vacant and unsupervised lot on the Northeast end of Ehukai St where you plan to create the commercial spaces. Our property extends to the high-water mark according to the shoreline survey on file with the County. This is a fixed lava rock shoreline with cliff, which has not changed in generations. This lava rock shoreline with cliff does not allow passage across the waterfront without trespassing. The high-water mark is below the cliff level. There is no public right of passage in this area. It is not a beach access corridor nor has the County taken the necessary steps to condemn and buy the land to form a public right of way. Therefore, we would like you to take immediate action to address this issue and incorporate this into your development plans. Signage, physical barriers, and plantings would all help.

3. We are concerned about additional noise from effectively moving the retail operations in the area closer to the only two residential properties on Ehukai St. Although the Outrigger hosts wedding right next to our property, there are very good about ensuring all noise stops by 10 PM. Manta Ray tours currently run past 10 PM. We want to ensure that the residential 10 PM quiet hours will still be observed.

4. The public access parking area on your land on Ehukai St is embarrassing. Can you please pave it, mark the spaces, pick up the trash, and start maintaining it? There was a derelict van with long expired tags parked there for 4 weeks until last week. I waited for the Outrigger to do something about it. They didn't. When I finally called the police, they told me mine was the first report about this vehicle. That is absurd. This is on your land that the Outrigger leases. The Outrigger staff seems to think the public access areas are someone else's responsibility. It is your land!

5. You have not been good stewards of your land in the area. Hoping you can start to change that now. No reason to wait for redevelopment. You can remove junk vehicles, pick up trash, and do something when people decide to camp and car camp. You have multiple people camping on your properties now. That adds trash and will likely lead to brush fires at some point. I have reached out multiple times to your asset manager for the area. She has been mostly responsive but it is an ongoing problem that requires more than a reactionary approach to one of the few full-time residents in the area.

6. Please consider ending Kaleiopapa St at the County boat ramp and not continuing it as it is now past Fair Winds Snorkel Cruises. There are only eight parking spaces there now at the end so it would have a negligible impact on parking. It would open up the area more to recreation, improve pedestrian safety, and allow for more green space around the significant cultural monuments and the cave.

7. Your lots in the area on Ehukai St, Kaleiopapa St, and Kamehameha III Rd are not zoned to be

storage yards or boat yards but that is how they are being used now. Your tenants illegally store derelict cars, trailers, boats, and heavy equipment and make boat repairs. All of this looks terrible and leads to environmental damage of the land and the bay. Please clean this up immediately and factor this in for future plans.

## Paul-Richard McCullough

I am unequivocally against any resort development in Keauhou Bay. Keauhou Bay should not be viewed as a profit center for Kamehameha Schools but a historic and sacred place to be respected and protected. Overrunning sacred sites with tourists just to make money is not pono, it is not aloha.

**From:** Jasmin McCracken <[REDACTED]>  
**Sent:** Sunday, July 21, 2024 11:00 AM  
**To:** 221053-01 KS Keauhou Entitlements  
**Subject:** Keauhou Bay

**Categories:** Green Category

My family loves Keauhou Bay. We paddle, sail, and play volleyball here. Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a serious negative impact in Keauhou Bay.

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff."

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," shares that the golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are being held off from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endanger these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

🌺 Mahalo,

Jasmin McCracken

## Kathleen McMillen

June 30, 2024

Attn: Mr. : Kawika McKeague  
G70 Consultant via email (keahoubay@g70.design)

Subject: Keahou Bay Management Plan Draft Environmental Impact Statement(DEIS)

My biggest concern with the Kamehameha Schools (KS) proposed project is the already fragile water quality of the bay. There should be no development of any kind near Keahou Bay until the sewer situation is resolved in the area. Several waterfront homes on the north side of this bay have only cesspools. And even the few that have septic tanks are at too low an elevation and are too close to the ocean to have adequate leach fields, thus increasing the bacteria levels in the bay. These lots need to be connected to the nearby local private sewer system or the County sewer lines, if the private system is not available. KS's lazy response to this issue in the April 2022 meeting was the area is out of their jurisdiction. Hmm, I bet they would find a way to make it happen if approval of their proposed resort was predicated on getting all the bayfront homes on sanitary sewer line. It would require some work with the local private system and the County DPW, but it is doable. And if the County doesn't have the will to disapprove of this project, the County should make sure the bayfront lots are connected to a sewer line before allowing development of the resort or anything else in the vicinity of Keahou Bay.

This problem is compounded by runoff after it rains. The drainage maps in the DEIS show it all flows toward the bay. Some is surface runoff and much is runoff just below the surface and it is particularly significant after a heavy rain. After very heavy rains the bay occasionally turns green from algae blooms creating very unhealthy conditions for users of the bay. Added development will add stress to this bay and may reverse its health permanently. The State Clean Water Branch does occasional monitoring of the bay waters and shows average bacteria counts are rising over the years.

Do we really want to add to the already fragile and congested conditions with a resort that only one-percenters can afford to enjoy?

The April 2022 meeting was supposed to be a scoping meeting where community input was taken seriously. It was clear to me and many others present that KS had already made up their minds on the scope of the project and were only there because the meeting is a requirement of the EIS legal process. Volume II of the most recent Draft EIS Appendix A and B summarizes the public input at the 2022 meeting and the inadequate answers by KS. The latter part of Appendix B shows many comments of community individuals who disagreed with the proposed project. Just about every single one of those comments was answered by KS with the exact same long boiler plate answer. That is so lazy on the part of KS and their consultant, but more importantly, insulting and disrespectful to the community. KS didn't even try to pretend to care what the community thought. I have seen better responses to proposed development in Kona from outside profit driven private developers.

Throughout the DEIS, KS made the comment that they need the revenue from the proposed resort to fund the needed cultural improvements in the plan. That is just not true. We all know KS has vast land holdings, many places to build a resort where the environment is not as fragile as it is at Keahou Bay. Or better yet, so we don't add another unneeded resort, how about improving the management of their many existing holdings (like the Keahou Shopping Center) thus improving their income stream.

In 2008, Kamehameha Schools said this when demolishing the Lagoon and Keahou Beach hotels to add a more appropriate cultural park: "Our charter for future development here is to make things pono, or right, to solve the mistakes of the past and move ahead. We want to make sure that any and all future development in Keahou, first and foremost, is culturally correct." The proposed resort is in conflict with this statement.

Kathleen McMillen

Cc: Zendo Kern, County Planning Director via email (planning@hawaiicounty.gov)









Report  
Lyn Aick  
1 year ago  
For the necessary location that doesn't allow our community to access the small park and beach. The condition on each side are already difficult to get too. This is one of the best places for our peaceful gatherings

0

Report  
Lucas Felipe  
1 year ago  
For more amenities

0

Report  
Luisa Sise  
1 year ago  
Enough of our land has been exploited for the common money

0

Report  
Kaci Cortez  
1 year ago  
Such a small historical place deserves a lake

0

Report  
Julia Ross  
1 year ago  
This is a very special spot where you will can canoe/paddle and feel like you're still living in Hawaii. Just come down and watch the kids playing in the water and fishing. This is where we look out the just hang out.

0

Report  
There are enough swimmers here already, we need more diverse sustainability for resorts. Maliana the Ama and the Ama will maliana you.

0

Report  
Mary Pook  
1 year ago  
The preservation of this area historical grounds is very important.

0

Report  
Maddy Snyder  
1 year ago  
There are enough swimmers. Save the bay

0

Report  
cheryl shultz  
1 year ago  
I have my own swimmers with the water. I wish before that they want to do other swimmers people who live in Hawaii and also already that live close by had talk of the local domain that the big island will have. I wish that the island can operate out of the port only otherwise them also believe there is a empty coming but most of they area you want to be brought in this or FY. Heywark Hawaii why.

0

Report  
David Pinsky  
1 year ago  
stop overbuilding

0

Report  
Mary De Man  
1 year ago  
Preserve this beautiful place

0

Report  
Patsia Gaskley  
1 year ago  
Kaula has to be a small for another resort. Kaula beach should not just be a plaque in the middle of a resort.

0

Report  
Steph Beck  
1 year ago  
No more resorts needed, keep our beaches as is.

0

Report  
Wayne Healy  
1 year ago  
Our development should be opposed. Developers are committing the infrastructure and drawing too many people into areas that are already stressed. It needs to stop.

0

Report  
Joanne A. Martinez  
1 year ago  
Please we do not need a big resort crowd & tourist bargainers on this sacred strip like of King Kamehameha III to destroy the cultural activities of Native Hawaiians here.

0

Report  
Jesse Kusanin  
1 year ago  
Kali Hahaione should be retained as a harbor, and not turned into yet another resort.

0

Report  
Gyula Chavez  
2 years ago  
It is a shame the way it is!

0

Report  
Aron Nizargun  
2 years ago  
Additional work to be protected. There are enough resorts already on this island.

1

Report  
Alisha Kabala  
2 years ago  
This is one of the best unmarked beaches we have on Hawaii Island. I believe it should stay marked place because we already have other resorts and houses in the area. As a native Hawaiian with children, it makes me more appreciate to try to keep it that way.

1

Report  
LESA Gabel  
2 years ago  
Lana'i is Critical

0

Report  
Lorenz Polsteren  
2 years ago  
I have been to this beautiful spot, and I remember Victor Laines from being in Kona many years ago.

1

Report  
Cristina Szymanski  
2 years ago  
This is an important place for locals, and another big resort where all the profit goes to the island is a huge step in the wrong direction for the state.

1



Shirley Lawrence  
2 years ago  
I love it all!

0

Report

Patricia Greenway  
2 years ago  
I wish they can not diminish the level of development.

0

Report

Lisa D'Nadele  
2 years ago  
This has been a very special place for me since 1980!

0

Report

Cara Baker  
2 years ago  
We don't need any more peaceful places taken over

0

Report

Alex Friss  
2 years ago  
I believe we need to protect our sacred spaces. Listen to the voices of the indigenous people. Stop turning away piece of land into something marketable.

0

Report

Jessie Prasad  
2 years ago  
Sacred ground should be kept sacred. It provides something that is hard to find in the world

0

Report

Robert B. Demotta  
I was raised here in the early 90's and can't see beautiful Keauhou in its original beauty. I don't even have to explain but if you know, you know!

0

Report

Nhu Friss  
2 years ago  
That's where I grew up

0

Report

Cheri Keatohi Alarado  
2 years ago  
Our contribution

0

Report

Jayden Dougherty  
2 years ago  
This local spot should not be ruined by tourism

0

Report

Kate Garcia  
2 years ago  
This isn't right.

0

Report

Melissa Mathews  
2 years ago

0

Report

Olga Elkaidy  
2 years ago  
I am fighting because the land belongs to local people

0

Report

Robin Ageman-Collaghan  
2 years ago  
I am fighting because these islands are so developed as is and there should be every effort to determine what areas are still relatively close to their natural settings and not just another place for another short term rental.

0

Report

Cynthia Lullienema  
2 years ago  
Another add out and for profit? When will enough add out be enough????

0

Report

William Wood  
2 years ago  
I want to save the bay

0

Report

Myra Williams  
2 years ago  
It is my responsibility!

0

Report

Nicole Nairond  
We need to keep the Aha, ANA!

0

Report

Gregory Wilson  
That would just be tragic!

0

Report

Dan Lucchesi  
4 years ago  
I am fighting because... GOP EVIL ROTTEN BASTARDS... August 6, 2018 Dear Americans, THE FLAGIE Ring around the pole Republicans on their toes Much to disclose Really! See Time to expose... (published Dec. 1982) I wish the Democrats for all they have done, over 70 years of my life. We need to speak to the people about Republican history and how they have effected our countries progress and that most of our congressmen speak, have at least I example, Unstable AS about I exposed. The rubber barrel have been the Democratic down fall. They are the real enemies! EPOCSE Our Governments self serving bureaucracy Corporate greediness of responsibility People's participation in unethical religion, in unethical community. Scores more, (posting with humanity America) The land of the short? We need to get coverage on local the Democratic like that are being paganoholes!

0

Report

Stewart Olson  
I am fighting for all the reasons given. Hawaii does not need more commercial ventures. The true beauty & appreciation of Hawaii is in enjoying nature. Please hands-off. In 20 years, so many will be so grateful for that decision in an over-crowded, commercially motivated island that the displaced is, native inhabitants.

0

Report

Steve Freston  
2 years ago  
Ain't over profit. Listen to your hearts not your wallets

0

Report

I do love my island

0

Report

Paul Howard  
2 years ago

No

0

Report

Sarah Machab

2 years ago

Please don't build Keauhou. Or if you need to go forward, be a zero-waste resort and give a good kamamāna pūnui!

0

Report

Kathy Arnold

2 years ago

Please help! Save the beautiful, natural place we all look forward to visiting!

0

Report

Sherri Wilson

2 years ago

Enough with the resorts! Leave Keauhou Bay as it is for everyone to enjoy.

0

## Rebecca Melendez

Aloha,

Please reject Kamehameha Schools EIS because Keauhou Bay is declared Impaired water H1713293 by the EPA Clean Water Act. This bay needs to be preserved because it is a natural resource that is very sensitive.

"The State of Hawaii Conservation District is a designated land area managed by the Department of Land and Natural Resources (DLNR) through the Office of Conservation and Coastal Lands (OCCCL). This district was established to protect Hawaii's natural resources and encompasses various land types including watersheds, scenic areas, parklands, wilderness areas, beach reserves, and habitats for endemic plants and wildlife. The Conservation District also includes submerged lands makai of the shoreline."

<https://dlnr.hawaii.gov/occl/conservation-district/>

Keauhou Bay is a natural resource and **NEEDS TO BE PROTECTED**. Under the EPA Clean Water Act it is Impaired water area and DLNR it should be conserved because it is an extremely sensitive area.

The district is divided into five subzones:

Protective: The most environmentally sensitive areas.

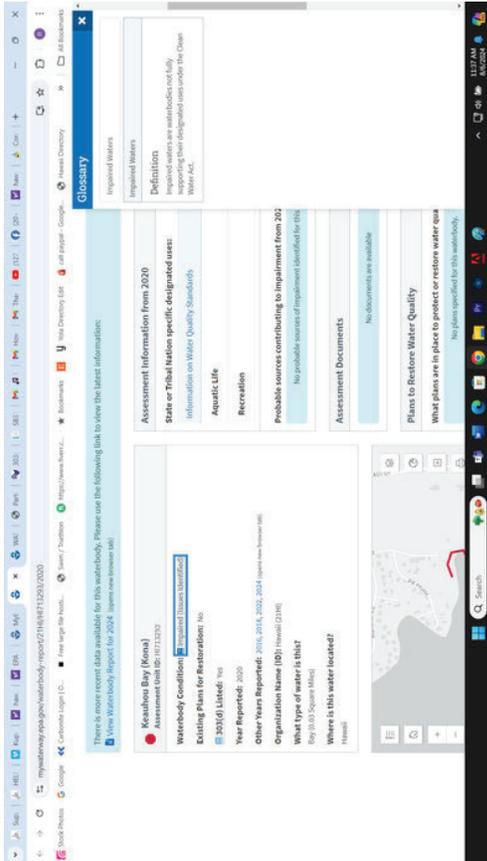
Limited: Areas with some environmental sensitivity.

Resource: Areas designated for resource conservation.

General: The least environmentally sensitive areas.

Special: Areas with unique land uses

Rebecca Melendez



## Rebecca Melendez

To Whom It May Concern,

The attached MOA includes information regarding the study of the effects of climate change on the Hawaiian monk seal. The study will focus on the monk seal's ability to survive in a changing environment. This information is for your information and is not intended to be used for any other purpose. Thank you for your interest in the study.

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Thank you,  
Rebecca Melendez

## Rebecca Melendez

**From:** Rebecca Melendez  
**Sent:** Thursday, July 4, 2024 6:48 AM  
**To:** 221053-01 KS Keaouhou Entitlements; Roy, Alex; Keaouhoubay@ksbe.edu  
**Subject:** Letter #2 Attention Keaouhou Bay EIS Comment Letter

To Whom It May Concern, The endangered Monk Seal has been known to rest in Keaouhou Bay and if a resort is allowed to be built, that will bring a lot more people down to Keaouhou Bay and if a monk seal is resting they most likely will disturb the monk seal with their selfies because it is fully known this is now a SELFIE CULTURE. This information is by NOAA Scientist, "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie!'" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought. " <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies> Has there been a detailed traffic study for the increase in cars that will be added to this already severely traffic area? "The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution. Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds. Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs." The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20increase%20of%20food%20webs>. If you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behaviour of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished." The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/> If you allow this resort the amount of people in this bay will fully increase and, "Hawai'i's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations>. There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keaouhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles. Please, see this information and state in your report that this Bungalow Resort will have a SERIOUS NEGATIVE IMPACT in Keaouhou Bay as it's been proven in all the articles above. Thank you, Sincerely, Rebecca Melendez

To Whom It May Concern,

The endangered Monk Seal has been known to rest in Keaouhou Bay and if a resort is allowed to be built, that will bring a lot more people down to Keaouhou Bay and if a monk seal is resting they most likely will disturb the monk seal with their selfies because it is fully known this is now a SELFIE CULTURE.

This information is by NOAA Scientist, "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media.

There's a seal on the beach! Let's go get a 'selfie!'" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought. " <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

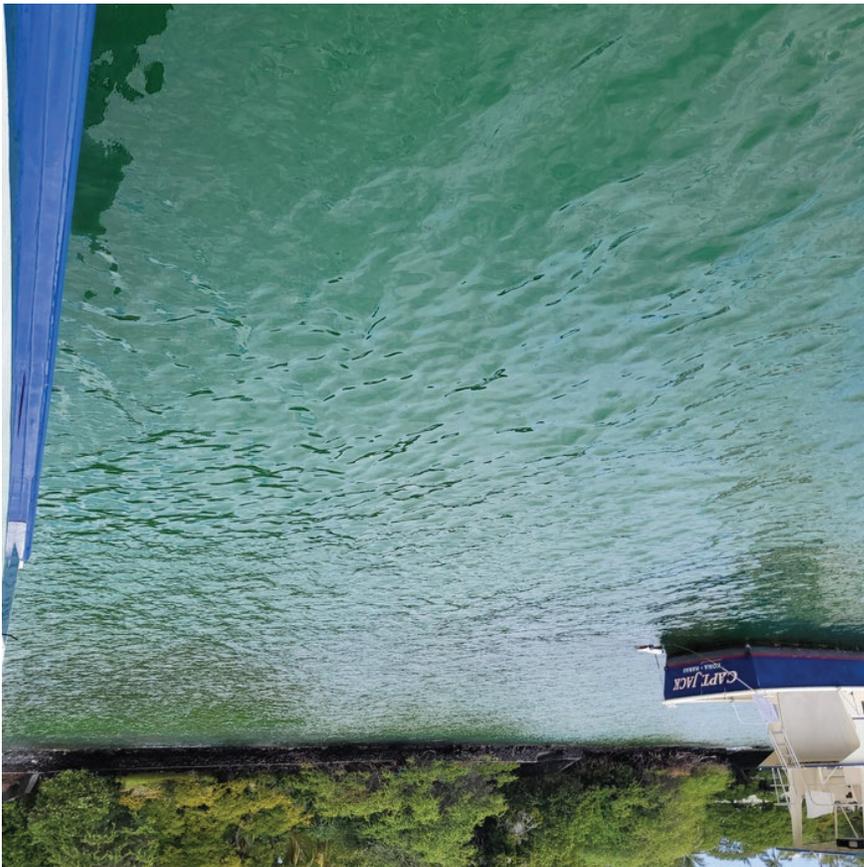
Has there been a detailed traffic study for the increase in cars that will be added to this already severely traffic area?

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

- Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the **destruction of sensitive marine habitats** such as mangroves, coral reefs, and seagrass beds.
- Coastal development may cause the run-off of **sediments** into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20of%20food%20webs>.

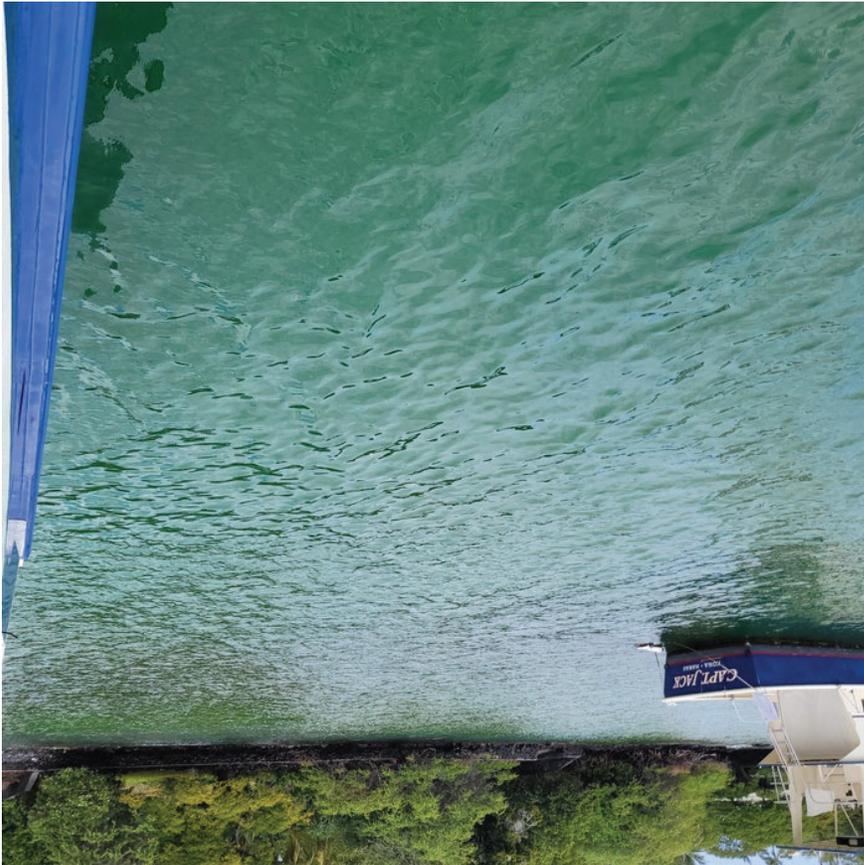


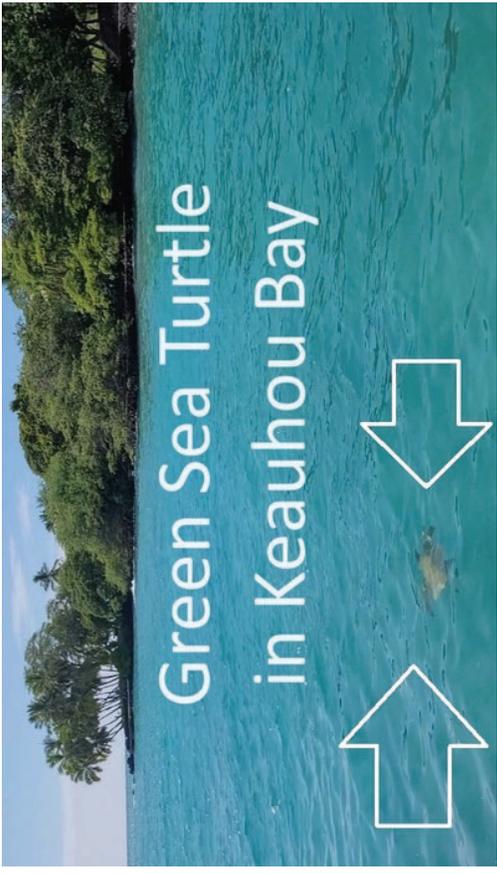


## Rebecca Melendez

To whom it may concern, Heavy storms can come in and serious toxins from the golf course are able to run into Keaouhou Bay causing Algae Blooms and Sea Foam, even with the best filter that is trees and land because at times tropical storms are more than any land can absorb. This doesn't happen that often but if you allow this Bungalow Resort development in Keaouhou bay, algae blooms and sea foam will happen more often because fertilizer, pesticides, waste... will be allowed to runoff into the bay because the natural pollution filter, the trees and land will be gone and pavement can't hold as much runoff as the natural trees and land. "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://dlnr.hawaii.gov/dar/species/sea-turtles/> ENDANGERED SPECIES CONSERVATION Endangered Species Act" Section 2. Findings, Purposes, and Policy (4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section." This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-act> The word in the very Endangered Species Act states, "to conserve" and conserving the endangered species that enter into Keaouhou Bay would be to NOT DEVELOP A BUNGALOW RESORT because this would cause serious runoff that would pollute the bay and endanger these already endangered species the green sea turtle and the monk seal. "§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." This was taken from [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm) Please, see that developing a Kamehameha Schools Bungalow Resort in Keaouhou Bay would threaten endangered species due to the unavoidable pollution runoff that would happen a lot more often due to taking out the natural pollution filter; that is the trees and the land. Thank you, Rebecca Melendez







Rebecca Melendez

Please read my attachment.

Thank you,  
Rebecca Melendez

COUNTY OF HAWAII  
PLANNING DEPARTMENT  
101 Pauahi Street, Suite 3  
Hilo, HI 96720

Via E-Mail: [planning@hawaiiicounty.gov](mailto:planning@hawaiiicounty.gov)

RE: Keauhou Bay Management Plan EISPN

Aloha—

Kamehameha Schools (“KS”) is to be lauded for its planning and expenditures to create and implement the Keauhou Bay Management Plan (KBMP), which appears to dovetail with plans to develop the area around Kahalu’u Beach Park as part of a larger cultural and educational corridor between Kahalu’u and Keauhou.

My concern is that the EISPN contains a couple of erroneous assumptions and in other respects may lead to an EIS that does not take a “hard look” and some important issues. These are discussed below.

A. Erroneous Assumptions

1. “Very Low Rainfall and Runoff” (EISPN 3’16). The EISPN assumes that because rainfall reaches “a maximum average of 35 inches per year” that there is “very low rainfall and runoff” into the bay. This is based on a 2016 NOAA analysis and does not account for any changes in those averages in the last eight years. This must be reconsidered in light of the rapid changes brought on by climate warming. This assumption also appears to be internally inconsistent with other statements in the EISPN. See, notably EISPN 4-4 at Paragraph 11 acknowledging that “Portions of the Project Area are also located within the AE and VE Flood Zones.”

In my experience, regardless of the historic maximum rainfall average, there are several heavy rains each year that flood across the Old Kona Road onto the adjoining downslope to the bay. The force of the water is sufficient to dig a noticeable trench across the road and into the downslope to the bay carrying rocks and dirt from the road with it.

The flooding also flows down Kamehameha III Hwy sufficient to overflow the curb at the end of the road, dumping silty water directly into Keauhou Bay. The bay water turns brown and is unattractive for swimming

following these events. See, photo attached electronically as Exhibit A to this letter. Others are available on request.

2. No Rare, Threatened, or Endangered Species or Habitats (EISPN at Paragraph 9)  
The EISPN notes that: "The Project is not expected to affect any rare, threatened, or endangered species or habitats." I should be noted that Monk Seals have been known to haul out to rest on the old Keaouhou boat ramp, south of the rock wall on the north side of the bay. See, photo attached electronically as Exhibit B to this letter.

#### B. Silt Accumulation in the Bay

The federal National Oceanographic and Atmospheric Administration ("NOAA") has listed Keaouhou Bay One as a "Marine Protected Area" that is to be "permanently protected year-round" and that such "protection be in perpetuity".<sup>1</sup> Historically, the federal Environmental Protection Agency ("EPA") also performed a water quality analysis of various bodies of water every four years. In 2006 and 2010 the EPA found that the water in Keaouhou Bay was "good", but in 2014 it concluded that it was "good" for recreational use, it was "impaired" due to "turbidity" as it relates to "Fish, Shellfish, and Wildlife Protection and Propagation."<sup>2</sup>

- C. Nitrogen Pollution. An undated research study in about 2015 out of the University of Hawai'i, Manoa, Department of Botany, found that: "[O]f all the West Coast of the Big Island, the highest average percentage of tissue N [Nitrogen] and predicted N concentration was found in the surface samples of Keaouhou Bay." This study was comprehensive and included the full West coast of the Island of Hawaii from the North tip to South Point.

The study discusses Keaouhou Bay in part as follows:

Keaouhou Bay nutrient-rich groundwater plumes demonstrated high values for nitrogen (5.0 to 5.9 δ15N values and high ulva (green algae)

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<sup>1</sup> See, National Oceanic and Atmospheric Administration, NOAA's National Ocean Service, Management & Budget Office, Coral Reef Habitat Assessment for U.S. Marine Protected Areas: State of Hawaii: NW and Main Hawaiian Islands, Special Projects (February 2009). Last consulted April 22, 2022, at: <http://www.cortis.noaa.gov>

<sup>2</sup> United States Environmental Protection Agency, Waterbody Quality Assessment Report Water Quality Assessment and TMDL Information, 2010 and 2014 Waterbody Reports for Keaouhou Bay (Kona). Last consulted April 22, 2022, at: [https://aspub.epa.gov/waters10/atians\\_waterbody/control?p\\_au\\_id=HI713293&p\\_cycle=2014#atrainments](https://aspub.epa.gov/waters10/atians_waterbody/control?p_au_id=HI713293&p_cycle=2014#atrainments)

The information at this site (now 8-years old) is listed as out-of-date, but the alternative site given for the information says that the data is not available for Keaouhou Bay.

abundance in the bay. Ecologically successful green algae like U. fasciata are potentially invasive. Coastal waters near harbors, industrial complexes, and residential areas with nutrient-rich and/or fresh water input often have blooms of Ulva species that coat ships' hulls, cover pilings and shorelines, and restrict outflow pipes. U. fasciata is classified as a marine fouling organism, and studies in control and eradication are presently underway.

The study further noted that:

In Keaouhou Bay the potential sources of anthropogenic nutrients include leaching cesspools, surface road and field runoff during rain events, fish biomass, golf course contribution and vessel borne and bilged biomass.<sup>3</sup>

These government and University of Hawaii analyses are admittedly dated, but as a frequent observer of Keaouhou Bay and given the exhibits attached to this letter I would have the say the situation in Keaouhou Bay has not improved and if anything worsened over the last eight years. The EIS should take a "hard look" at these problems and transparently assess them.

- D. User Conflicts. KS has developed the Keaouhou Bay Management Plan ("KBMP") to "reorient uses at the bay and establish new place-based cultural education and revenue generating opportunities." The EISPN recognizes that Keaouhou Bay is "highly used by residents, visitors, and community groups, which creates congestion and competing interests." KS then describes the purpose of the Project that is the subject of the EISPN is to: "develop resilient communities by stewarding the 'aima to support resilient economies, cultural landscapes, diverse learning, and career pathways." Concluding that: "The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keaouhou Bay based upon community and organizational values that were identified during the Management Plan process." (EISPN 1-1)

Pregnant in all of this is the potential for renewed conflicts between the customers of a 156-unit "Appropriate Boutique Resort." Estimating an average of two to four people per unit could mean a daily occupancy of between some 300 to 600 guests. These people would come from very different backgrounds and have purposes in coming to Hawai'i that could

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<sup>3</sup> See, Megan Daller, "Preventing the introduction and spread of nutrient driven invasive algal blooms and coral reef degradation in West Hawaii", University of Hawai'i, Manoa, Department of Botany



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**From:** Rebecca Melendez <[REDACTED]>  
**Sent:** Tuesday, July 9, 2024, 4:59 PM  
**To:** 221053-01 KS Keaouhu Entitlements; Roy, Alex; Planning@hawaiicounty.gov; Keaouhubay@ksbe.edu  
**Subject:** Kamehameha Schools EIS Draft For Keaouhu Bay WILL HAVE NEGATIVE IMPACT!  
**Attachments:** Keaouhu Bay Green.jpg; Keaouhu Bay Green Algae.jpg  
**Categories:** Yellow Category

To whom it may concern,

Please, read the scientific proof below and state in your report that this Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT in Keaouhu Bay as stated in all the different reported articles below.

Keaouhu Bay has the trees and land just under the golf course (that Kamehameha Schools wants to clear for their bungalow resort) that protects Keaouhu Bay from a lot of algae blooms because it soaks up the polluted land from fertilizer, weed killer... and unfortunately when there is a severely heavy rain storm the land up on top of the bay has a greater runoff than normal from the golf course and an algae bloom happens.

I took these photos and they show this kind of an algae bloom that happened in Keaouhu Bay Feb. 13, 2023.

If you clear this land, this kind of algae bloom will happen more often and end up killing a lot of coral and marine life as stated in the two Global Coral Reef Alliance articles because this is what happened in the Bahamas when they researched the reef before and after a golf course development, and even though this development is not a golf course development, it will be just under one and this will allow the pollution from the golf course to come down to the bay a lot more often.

This information was taken from Global Coral Reef Alliance titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development.. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution... "<https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keaouhu Bay you WILL be agreeing to pollute this bay for years to come because the golf course runoff won't have the best protection which is the natural trees

and land that can soak up the polluted water most of the year and this kind of harmful algae bloom will happen more often.

Here is another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef

...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef/>

The green sea turtle that is federally protected can be seen in Keaouhu Bay weekly. Please see the following article that states "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Even with storm drains if you allow this development it WILL POLLUTE Keaouhu Bay as the above article (that was written in 2014 because runoff water from developments were polluting the ocean even then) states, and this bay holds many sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals that have rested on the dock before and...that will ALL be harmed by the more severe pollution runoff that WILL happen because developments can't help but pollute the water nearby.

Please, hear these words and help keep Keaouhu Bay from pollution so the coral and all the marine life will live for years to come in the bay.

Please, state this Bungalow Development WILL cause a SEVERE NEGATIVE IMPACT if allowed.

Thank you,

Sincerely,

Rebecca Melendez

## Rebecca Melendez

To whom it may concern, Heavy storms can come in and serious toxins from the golf course are able to run into Keauhou Bay causing Algae Blooms and Sea Foam, even with the best filter that is trees and land because at times tropical storms are more than any land can absorb. This doesn't happen that often but if you allow this Bungalow Resort development in Keauhou bay, algae blooms and sea foam will happen more often because fertilizer, pesticides, waste...will be allowed to runoff into the bay because the natural pollution filter, the trees and land will be gone and pavement can't hold as much runoff as the natural trees and land. "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location."

<https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/> Algae Bloom photos taken in Keauhou Bay Feb. 14, 2024. Sea Foam in Keauhou Bay Dec. 2020. This is not that often because the natural trees and land hold most of the toxic pollution from the golf course back when it rains. Also, The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site

<https://dlnr.hawaii.gov/dar/species/sea-turtles/> "Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/> ENDANGERED SPECIES CONSERVATION Endangered Species Act " Section 2. Findings, Purposes, and Policy (4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to— (b) PURPOSES.— The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section." This was taken from

<https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac> The word in the very Endangered Species Act states, "to conserve" and conserving the endangered species that enter into Keauhou Bay would be to NOT DEVELOP A BUNGALOW RESORT because this would cause serious runoff that would pollute the bay and endanger these already endangered species the green sea turtle and the monk seal. " § 195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." This was taken from

[https://www.capitol.hawaii.gov/hirscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hirscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm) Please, see that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay would threaten endangered species due to the unavoidable pollution runoff that would happen a lot more often due to taking out the natural pollution filter, that is the trees and the land. Thank you, Rebecca Melendez

**From:** Rebecca Melendez <[REDACTED]>

**Sent:** Wednesday, July 10, 2024 3:01 PM

**To:** 221053-01 KS Keauhou Entitlements; Roy, Alex; Planning@hawaiicounty.gov; keauhoubay@ksbe.edu

Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT!

**Subject:** Monk Seal in Keauhou Bay.png; swimmin turtle.jpg; Green sea turtle.jpg; Runoff pollution after storm.png; Keauhou Bay Green Algae.jpg; Keauhou Bay Green.jpg; Pollution Runoff.png

**Categories:** Yellow Category

To whom it may concern,

Heavy storms can come in and serious toxins from the golf course are able to run into Keauhou Bay causing Algae Blooms and Sea Foam, even with the best filter that is trees and land because at times tropical storms are more than any land can absorb.

This doesn't happen that often but if you allow this Bungalow Resort development in Keauhou bay, algae blooms and sea foam will happen more often because fertilizer, pesticides, waste...will be allowed to runoff into the bay because the natural pollution filter, the trees and land will be gone and pavement can't hold as much runoff as the natural trees and land.

"If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

Algae Bloom photos taken in Keauhou Bay Feb. 14, 2024. Sea Foam in Keauhou Bay Dec. 2020. This is not that often because the natural trees and land hold most of the toxic pollution from the golf course back when it rains.

Also, The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

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ENDANGERED SPECIES CONSERVATION

Endangered Species Act

"Section 2. Findings, Purposes, and Policy

**(4) the United States has pledged itself as a sovereign state in the international community to conserve** to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—**The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved**, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section." This was taken from [https://www.fisheries.noaa.gov/national/conservation/endangered-species-ac](https://www.fisheries.noaa.gov/national/conservation/conservation/endangered-species-ac)

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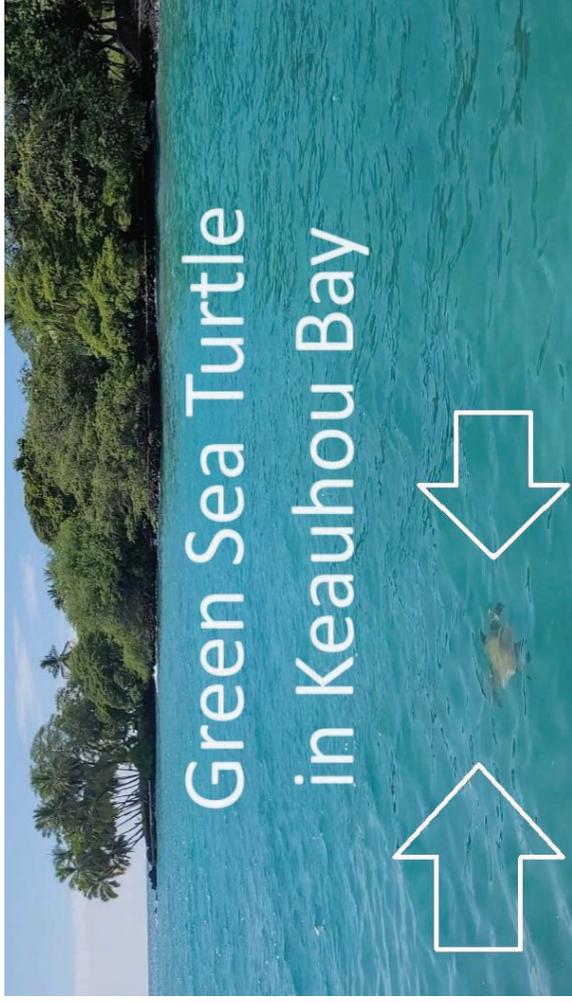
**"§195D-5 Conservation programs.** (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." This was taken from [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

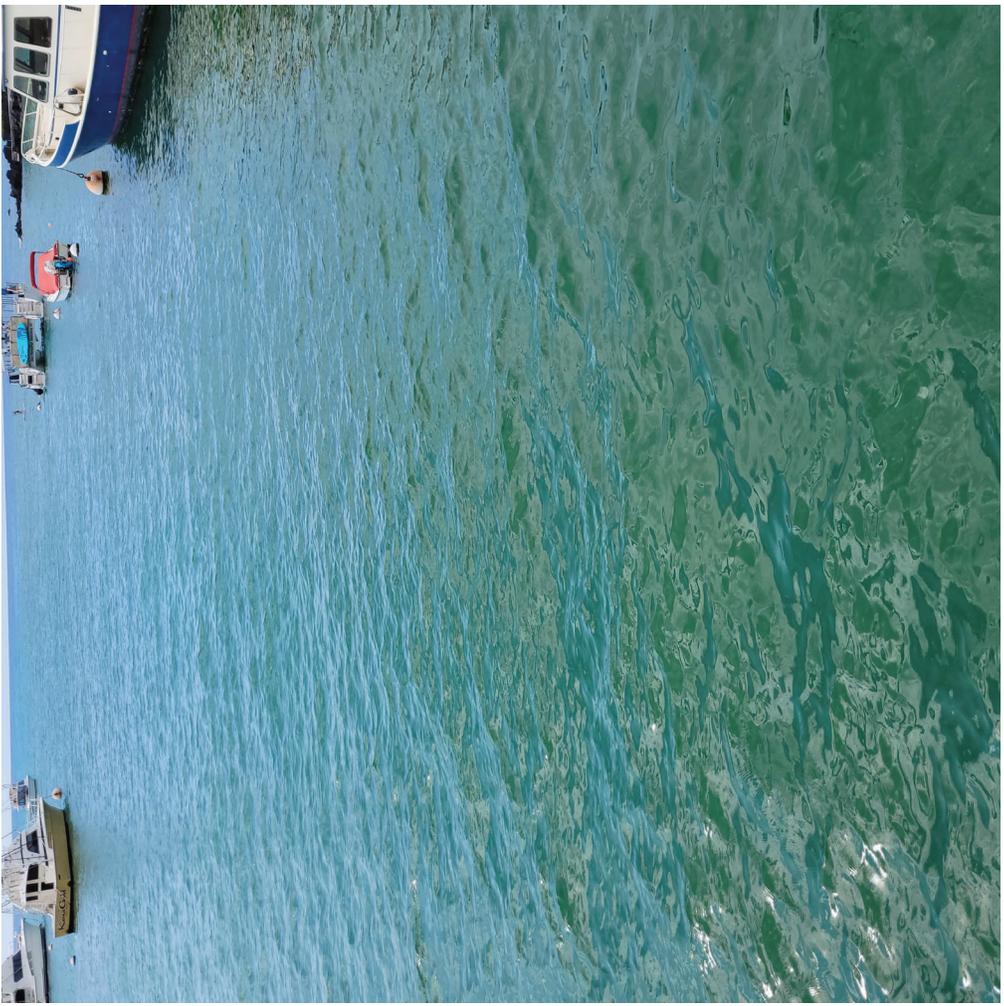
Please, see that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay would threaten endangered species due to the unavoidable pollution runoff that would happen a lot more often due to taking out the natural pollution filter, that is the trees and the land.

Thank you,

Rebecca Melendez

















COUNTY OF HAWAII  
PLANNING DEPARTMENT  
101 Pauahi Street, Suite 3  
Hilo, HI 96720

Via E-Mail: [planning@hawaiicounty.gov](mailto:planning@hawaiicounty.gov)

RE: Keauhou Bay Management Plan EISPN

Aloha—

Kamehameha Schools (“KS”) is to be lauded for its planning and expenditures to create and implement the Keauhou Bay Management Plan (KBMP), which appears to dovetail with plans to develop the area around Kahalu’u Beach Park as part of a larger cultural and educational corridor between Kahalu’u and Keauhou.

My concern is that the EISPN contains a couple of erroneous assumptions and in other respects may lead to an EIS that does not take a “hard look” and some important issues. These are discussed below.

A. Erroneous Assumptions

1. “Very Low Rainfall and Runoff” (EISPN 3’16). The EISPN assumes that because rainfall reaches “a maximum average of 35 inches per year” that there is “very low rainfall and runoff” into the bay. This is based on a 2016 NOAA analysis and does not account for any changes in those averages in the last eight years. This must be reconsidered in light of the rapid changes brought on by climate warming. This assumption also appears to be internally inconsistent with other statements in the EISPN. See, notably EISPN 4-4 at Paragraph 11 acknowledging that “Portions of the Project Area are also located within the AE and VE Flood Zones.”

In my experience, regardless of the historic maximum rainfall average, there are several heavy rains each year that flood across the Old Kona Road onto the adjoining downslope to the bay. The force of the water is sufficient to dig a noticeable trench across the road and into the downslope to the bay carrying rocks and dirt from the road with it.

The flooding also flows down Kamehameha III Hwy sufficient to overflow the curb at the end of the road, dumping silty water directly into Keauhou Bay. The bay water turns brown and is unattractive for swimming

following these events. See, photo attached electronically as Exhibit A to this letter. Others are available on request.

2. No Rare, Threatened, or Endangered Species or Habitats (EISPN at Paragraph 9)  
The EISPN notes that: “The Project is not expected to affect any rare, threatened, or endangered species or habitats.” I should be noted that Monk Seals have been known to haul out to rest on the old Keauhou boat ramp, south of the rock wall on the north side of the bay. See, photo attached electronically as Exhibit B to this letter.

B. Silt Accumulation in the Bay

The federal National Oceanographic and Atmospheric Administration (“NOAA”) has listed Keauhou Bay One as a “Marine Protected Area” that is to be “permanently protected year-round” and that such “protection be in perpetuity”.<sup>1</sup> Historically, the federal Environmental Protection Agency (“EPA”) also performed a water quality analysis of various bodies of water every four years. In 2006 and 2010 the EPA found that the water in Keauhou Bay was “good”, but in 2014 it concluded that it was “good” for recreational use, it was “impaired” due to “turbidity” as it relates to “Fish, Shellfish, and Wildlife Protection and Propagation.”<sup>2</sup>

- C. Nitrogen Pollution. An undated research study in about 2015 out of the University of Hawaii, Manoa, Department of Botany, found that: “[O]f all the West Coast of the Big Island, the highest average percentage of tissue N [Nitrogen] and predicted N concentration was found in the surface samples of Keauhou Bay.” This study was comprehensive and included the full West coast of the Island of Hawaii from the North tip to South Point.

The study discusses Keauhou Bay in part as follows:

Keauhou Bay nutrient-rich groundwater plumes demonstrated high values for nitrogen (5.0 to 5.9 δ15N values and high ulva (green algae)

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<sup>1</sup> See, National Oceanic and Atmospheric Administration, NOAA’s National Ocean Service, Management & Budget Office, Coral Reef Habitat Assessment for U.S. Marine Protected Areas: State of Hawaii: NW and Main Hawaiian Islands, Special Projects (February, 2009). Last consulted April 22, 2022, at: <http://www.coris.noaa.gov>

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abundance in the bay. Ecologically successful green algae like U. fasciata are potentially invasive. Coastal waters near harbors, industrial complexes, and residential areas with nutrient- rich and/or fresh water input often have blooms of Ulva species that coat ships' hulls, cover pilings and shorelines, and restrict outflow pipes. U. fasciata is classified as a marine fouling organism, and studies in control and eradication are presently underway.

The study further noted that:

In Keaouhou Bay the potential sources of anthropogenic nutrients include leaching cesspools, surface road and field runoff during rain events, fish biomass, golf course contribution and vessel borne and bilged biomass.<sup>3</sup>

These government and University of Hawaii analyses are admittedly dated, but as a frequent observer of Keaouhou Bay and given the exhibits attached to this letter I would have the say the situation in Keaouhou Bay has not improved and if anything worsened over the last eight years. The EIS should take a "hard look" at these problems and transparently assess them.

D. User Conflicts. KS has developed the Keaouhou Bay Management Plan ("KBMP") to "reorient uses at the bay and establish new place-based cultural education and revenue generating opportunities." The EISPN recognizes that Keaouhou Bay is "highly used by residents, visitors, and community groups, which creates congestion and competing interests." KS then describes the purpose of the Project that is the subject of the EISPN is to: "develop resilient communities by stewarding the 'aima to support resilient economies, cultural landscapes, diverse learning, and career pathways." Concluding that: "The Project aims to achieve this goal by reorienting uses and directing new development in appropriate areas around Keaouhou Bay based upon community and organizational values that were identified during the Management Plan process." (EISPN 1-1)

Pregnant in all of this is the potential for renewed conflicts between the customers of a 156-unit "Appropriate Boutique Resort." Estimating an average of two to four people per unit could mean a daily occupancy of between some 300 to 600 guests. These people would come from very different backgrounds and have purposes in coming to Hawai'i that could

<sup>3</sup> See, Megan Daller, "Preventing the introduction and spread of nutrient driven invasive algal blooms and coral reef degradation in West Hawaii", University of Hawai'i, Manoa, Department of Botany

well conflict with and overwhelm the residents of Hawai'i who now use Keaouhou Bay for very different purposes. The EIS must take a "hard look" at these potential conflicts and offer transparent and effective alternatives to address them, including "no action" on the resort development.

E. Wastewater. The EISPN briefly describes existing KS controlled sewage system. (EISPN 3-19 at Paragraph 3.19). It also describes the potential for "Unavoidable and Unresolved Impacts. (EISPN 4-2 at Paragraph 4.6). I will just note that when we paddle canoes past the condos north of the bay we can smell and see evidence of sewage effluent in the ocean. When we paddled south we now have the benefit of a similar experience off shore from the new million-dollar homes constructed a few years ago. The EIS should take a "hard look" at the effect a 156-unit resort will have on sewage entering Keaouhou Bay.

Thank you for the opportunity to comment.



**From:** Rebecca Melendez <[REDACTED]>  
**Sent:** Wednesday, July 17, 2024 12:52 PM  
**To:** 221053-01 KS Keahou Entitlements; Roy, Alex, Planning@hawaiicounty.gov, Keahouhay@ksbe.edu  
**Subject:** Big Island DOES NOT Have Resources for Kamehameha Schools Resort EIS- IT MUST BE REJECTED AS NEGATIVE IMPACT in Keahou Bay

**Categories:** Yellow Category

Aloha,

Can you please show me where in Kamehameha Schools EIS does it have any researched evidence that Big Island resources and infrastructure are able to accommodate another resort?

There has been a serious increase in population after COVID and after the Maui fires, and I have included many different articles that show Big Island resources and infrastructure already are having serious NEGATIVE issues supporting the people who live here and visit here.

Can you please read the articles below about Big Island resources and infrastructure and see that the Big Island doesn't have the resources or infrastructure for another resort development?

Has Kamehameha Schools EIS done any sincere calculated reports that can prove this 150 rooms bungalow resort that could bring in over 300 extra visitors on island or more when maxed out, have they proven in any way that the island resources and infrastructure can handle this?

This is a survey that was copyright 2013 and that is eleven years ago so please consider the survey numbers have increased by a lot. This is just to give you an idea of what tourism resources consume on island. Please, see this survey report on this link

[https://kohalacenter.org/archive/pdf/Research\\_BI\\_ResourceUseWasteGenerationTourism.pdf](https://kohalacenter.org/archive/pdf/Research_BI_ResourceUseWasteGenerationTourism.pdf)

This is in the Introduction, "The tourism industry annually attracts about 6 million visitors to the state of Hawaii (Hawaii Tourism Authority 2010), and it accounts for one-quarter of the state's gross domestic product and one-third of its jobs (DBEDT 2010; Thomas 2009). The island of Hawaii (the Big Island) welcomes more than one million tourists annually. The highest growth (67% in daily visitors on the Big Island was registered between 1990 and 2007 (DBEDT 2008). It is widely known that the tourism industry is an economic engine for the Big Island. Tourism utilizes a significant share of the total electricity and fuel used on the island; however, the total amount and detailed breakdowns have not been quantified. The economic growth of the island must be carefully assessed and managed to mitigate negative impacts on its environment and sustainability."

This information is on page 8 under Summary and Conclusion, "The estimates show that the tourism sector surveyed for this study accounts for 21.7% of the island's total energy consumption, 44.7% of the islandwide water consumption, and 10.7% of the island-wide waste generation."

The above information is a report that shows around what the tourism industry consumed in island resources 11 years ago. Does Kamehameha Schools EIS have any kind of report like this one, because it needs to be shown that Big Island has the resources for this kind of resort development.

The articles below will show that Big Island DOES NOT have the resources and infrastructure for another resort development and for this you must reject this EIS and show that it WILL HAVE NEGATIVE IMPACT on Big Island.

### Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawaii'i landfill

September 17, 2023

The West Hawaii'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years. (File photo)

Of the 900 total votes in our most recent poll, which asked people to weigh in on the best way to extend the life of the Big Island's [only remaining landfill](#), all of the above was the most popular answer, garnering 274 votes, or 30%.

The West Hawaii'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

### A county commission drafts ordinance aiming to ban recyclables at West Hawaii'i landfill

By [Megan Moseley](#)  
September 6, 2023

Hawaii County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawaii County Director of Environmental Management, told commissioners the West Hawaii'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics,

paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Kaahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

### Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER

• APRIL 2, 2024

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

**Drought Conditions On Hawai'i Island Prompt Water Supply Message by Big Island Video News**

on Oct 5, 2023 at 3:59 pm

**(BIVN)** – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information **from the U.S. Drought Monitor**. There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawai%CA%BBi-island-prompt-water-supply-message/>

**U.S.**

**Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**

By **Li Cohen**

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to significant droughts, and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the world's largest surfing wave pool opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. " ... We are on the verge of a greater catastrophe."

"We are in a water crisis, that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawai'i, told CBS News, saying that if the reasons for this crisis aren't soon addressed, **"We may come to a point where we have to decide ... who gets water and who doesn't."**

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island parts need to be shipped and the power plant has generators that are not working and because of this, and other reasons, the Big Island needs to seriously conserve power so that everyone will have power, and if this can happen once it can happen again.

#### UTILITIES

UPDATE: HECO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HECO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity use is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

#### Big power supply problems continue to plague Hawaii island

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

#### COMMUNITY

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO

PUBLISHED 9:00 AM ET MAR. 26, 2024

#### What You Need To Know

- Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity
- When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use
- Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays
- If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

Thank you for your time,

Sincerely,

Rebecca Melendez

[Add: Please see the photos of the Endangered Green Sea Turtle and the Endangered Monk Seal, which inhabit the Keanahou Bay.](https://www.fishbase.org/ncic/species/Endangered_Species_Act/status) The Endangered Species Act states, "The Endangered Species Act of 1973, which provides for the protection of certain species, and their habitats, both on land and in the water." [https://www.fishbase.org/ncic/species/Endangered\\_Species\\_Act/status](https://www.fishbase.org/ncic/species/Endangered_Species_Act/status)

The Endangered Monk Seal and the Endangered Green Sea Turtle both swim and live in Keanahou Bay, and the Endangered Species Act states, "provides a framework to conserve and protect endangered and threatened species, and their habitats, both on land and in the water." [https://www.fishbase.org/ncic/species/Endangered\\_Species\\_Act/status](https://www.fishbase.org/ncic/species/Endangered_Species_Act/status)

habitat. It is to discuss these endangered species habit with development pollution and hence, threaten their lives, and go completely against the Endangered Species Act of 1973. The number of People live on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat through runoff of sediments and pollution. Coastal development involves activities such as the construction of buildings, stabilization of shorelines, and agriculture that involves the denaturation of sensitive marine habitats for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs. This was taken from this site <https://oceanicnews.org/library/human-impact-coastal-development/>

[https://www.fishbase.org/ncic/species/Endangered\\_Species\\_Act/status](https://www.fishbase.org/ncic/species/Endangered_Species_Act/status)

course runoff that WILL happen because of the cleared land and installed pavement that will allow golf course runoff to be severe. Is there an in depth report on how much it rains in Keanahou because it rains annually at night throughout the entire year. Now, The golf industry uses approximately 50 pesticide active ingredients, including chlopyrifos—an insecticide that is banned for residential use by the EPA <https://morningstar.com/pages/active-ingredients-of-golf-courses>

<https://morningstar.com/pages/active-ingredients-of-golf-courses>

now the trees and land that they want to clear and develop their bungalow resort is, is a natural pollution filter, the land soaks in these pesticides and is the BEST protection filter Keanahou Bay has from golf course runoff. <https://morningstar.com/pages/active-ingredients-of-golf-courses>

Keanahou Bay, hence for these endangered species habitat. Please refer to Keanahou Bay and fully threaten the lives of these endangered species, as well as completely go against the Endangered Species Act of 1973 under Section 2. Findings, Purpose, and Policy (a) FINDINGS.—The Congress finds and declares that— (1) various species of fish, wildlife, and plants in the United States have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation; (2) certain species of fish, wildlife, and plants in the United States are now threatened with extinction through the actions of man; and (3) it is the policy of the United States to use the authority provided by this Act to protect and propagate such species and their habitats as of today and to allow a resort/development to be built above this Bay would threaten the very lives of these endangered species because it will allow golf pollution and development pollution to run into the species natural habitat, which is Keanahou Bay. Thank you, Sincerely, Rebecca Melendez

## Rebecca Melendez

Aloha,

I received this letter from Richard H. Bennett MS, PhD Applied Life Sciences LLC to send to you. Please, see this information and know that this bungalow resort Development WILL have a serious negative impact on the bay because of the water quality he mentions in his letter.

Thank you,

Sincerely,

Rebecca Melendez

July 24, 2024,

VIA EMAIL

COMMENTS REGARDING:

Draft Environmental Impact Statement (DEIS)  
for the Kamehameha Schools Keauhou Bay Management Plan  
Keauhou, Hawai'i Island, Hawai'i

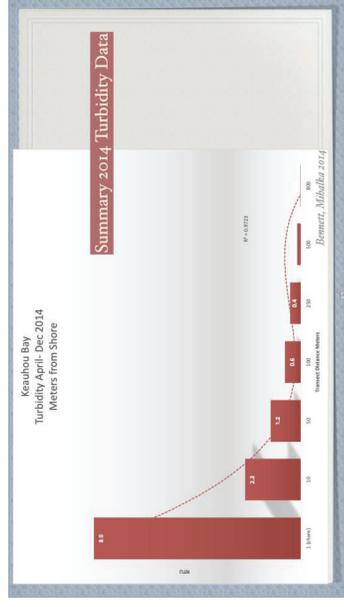
Richard H. Bennett MS, PhD  
Applied Life Sciences LLC

The following comments pertain specifically to water quality issues affecting Keauhou Bay. The draft EIS does not address these nor accounts for the fact that the State and the EPA list Keauhou Bay as an Impaired Water Body under section 303 D of the Clean Water Act (CWA). That law requires that impacts to the Bay be mitigated and that further impairment does not occur. This requirement under the law has not been met. Any development in the watershed needs to be conducted by a careful evaluation of this fact. Under the law, remediation begins by conducting a Total Maximum Daily Loading study known as a TMDL. The Bay is listed as impaired for exceeding the limits for turbidity. Turbidity has several causes in near-shore waters, such as runoff water with fine sediments and phytoplankton. Our research shows that turbidity is a problem in Keauhou Bay in the absence of surf events. The turbidity is also due to the overgrowth of marine phytoplankton. Our studies show that turbidity declines along a line moving offshore. The inner Bay has very poor circulation and is where most sediments and other factors causing turbidity arise. Phytoplankton grow in response to increased temperature and nutrient loading in the Bay. The lack of adequate circulation amplifies the problem.



The photo was taken in the summer of 2007 in response to concerns about the greening of Keauhou Bay. The brand name on the canoe paddle is not legible. (photo credit Bennett).

Figure 1. Nine-month summary of turbidity data for the Bay.



(Bennett 2002)

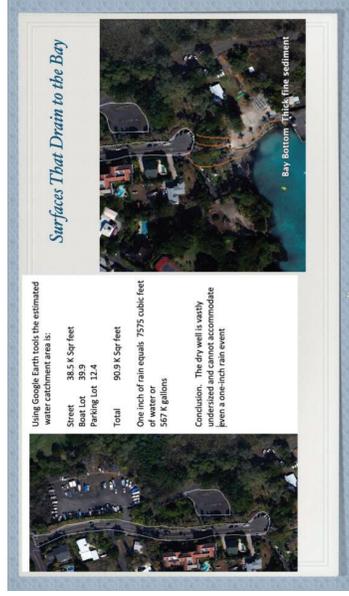
The nine-month summary chart above shows that turbidity is worse at the shoreline and decreases non-linearly in waters offshore. The slight rise in turbidity at 250 meters may be more of a phytoplankton effect than sediment.

The DEIS makes the following statement regarding groundwater:

*Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project in this area, surface runoff generally does not occur in the typical rainfall occurrence. Runoff either percolates into the underlying groundwater or evaporates into the atmosphere. There are no drainage reports or calculations on file with the County of Hawai'i or DOT for the adjacent public roadways or surrounding developed properties. However, existing stormwater runoff peak flow estimates for the three (3) drainage basins within the Project Area are presented in Table 4-4.*

The draft EIS fails to account for surface water runoff from Kamehameha III Road. At the Bayside terminus of the road is a dry well. It is typically loaded with sediment and unable to handle the storm flows that come down the length of the road. Thereafter, water overflows the curb and goes down the driveways and the slope into the Bay. As it does, it picks up considerable sediment and delivers it to the near-shore waters, increasing the turbidity problem (Fig 3).

Figure 2. Rain catchment area and water volume estimate.



(Bennett 2002)

As calculated above, a one-inch rain can produce over five hundred thousand gallons of water, with most of the flow eroding fine sediments as it enters the Bay (Figure 3). The County of Hawai'i was made aware of this dry well failure four years ago. Some of this water comes off of Kamehameha Schools land.

The DEIS statement that rainwater percolates to groundwater suggests groundwater is the terminus and the water does not flow to the sea. For at least 25 years, it was the position of the State that groundwater under the land does not communicate with the sea. Considerable research, such as Kneeb (2010), Dulai (2020), Peterson (2009), and others, shows that the State's policy is specious and not science-based. The State's anchialine system is a subterranean estuary (Bishop 2015). Consequently, the DEIS must reconsider the implication that the local groundwater is an inconsequential endpoint for fresh and waste water flows. A recent US Supreme Court decision held that wastewater disposal to the nearshore groundwater without the necessary permit was a violation of the CWA (see footnote page 7).

Figure 3. Stormwater and sediment Flow into the Bay.



The photos suggest considerable sediment erosion into the Bay.

Nutrient Degradation and Impairment of the Bay.

The draft EIS does not account for the elevated levels of nutrients in the Bay. Again, our research shows that nitrogen and phosphorus exceed state standards. Unlike other locations, it is unfortunate that the Hawai'i Department of Health fails to measure these nutrients in the Bay. Thus, conducting a nutrient analysis of the Bay waters was necessary. That analysis is provided below.



Figure 5. Non-permitted wastewater discharge to the Bay



Some years ago, federal funds were provided to upgrade the Bay boat launch facilities. Before the upgrade, boat wash water flowed over the surface and into the Bay. A dry well was installed, and it drained to surface water only a few feet below the drain. Boat wash water is potable water. The wash water contains fish liquids, blood, and particulate fish waste. This wastewater may be a source of ammonia in the Bay. Washed bilge water often contains oil products. The data in Figure 5 is from the wash water surface drain at Honokohau Harbor.

Since it is obvious this wash water flows into the Bay in the groundwater, the State should have applied for an NPDES permit. Such a permit is required for any ocean discharge of wastewater, especially in waters known to be impaired under the CWA. This requirement has been affirmed by the Supreme Court<sup>1</sup>.

#### Conclusions

The surface water and groundwater flows from the proposed development and those in the upper watershed need to be considered to ensure that further degradation of this impaired water body does not occur. This is referred to herein as a TMDL. Given the environmental ethics of Kamehameha Schools and the legal history of the Public Trust Doctrine of the State Constitution<sup>2</sup>, we suggest that these environmental impacts described above be studied for the project design and mitigated.

<sup>1</sup> *Courty of Maui, Hawaii v. Hawaii Wildlife Fund*, 140 S. Ct. 1462, 590 U.S. 165, 206 L. Ed. 2d 640 (2020).

<sup>2</sup> *Kelly v. 1250 Oceanside Partners*, 140 P.3d 985, 111 Haw. 205 (2006).

Keaouhou Bay is a small bay inlet on Hawaii'i Island and, as such, is subject to much more degradation than the open shore area of West Hawaii'i. As such, the Bay requires special protections.

Sincerely,

/s/ R.H. Bennett MS, PhD, President

#### References

Bennett, R. H. The Impaired Waters of Keaouhou Bay, Hawaii'i Island 2022. [https://www.youtube.com/watch?v=pk\\_Q25bX0s](https://www.youtube.com/watch?v=pk_Q25bX0s)

Bishop, Renée E., William F. Humphreys, Neven Cukrov, Vesna Žic, Geoff A. Boxshall, Marijana Cukrov, Thomas M. Iliffe et al. "'Anchialine' redefined as a subterranean estuary in a crevicular or cavernous geological setting." *Journal of Crustacean Biology* 35, no. 4 (2015): 511-514.

Dailer, M, Smith, C., Glenn, C. Preventing the introduction and spread of nutrient driven invasive algal blooms and coral reef degradation in West Hawaii'i, University of Hawaii'i, Manoa, Grant Number NA09NOS4260242, 9/30/2011

Dulai, Henrietta, Catherine Hudson, Trista Mckenzie, Brytne Okuhata, Diamond K. Tachera, and Aly El-Kadi, 2021. Geochemical Signatures of Coastal Groundwater Reflect Groundwater Flow Lines and Land-Uses in West Hawaii'i. Submarine Groundwater Discharge session, GDES; [International Tropical Islands Water Conference](#); University of Hawaii at Manoa, Honolulu, HI (via videoconference).

Knee, Karen L., Joseph H. Street, Eric E. Grossman>, Alexandria B. Boehm, and Adina Paytan. "Nutrient inputs to the coastal ocean from submarine groundwater discharge in a groundwater-dominated system: Relation to land use (Kona coast, Hawaii, USA)." *Limnology and Oceanography* 55, no. 3 (2010): 1105-1122.

Peterson, Richard N., William C. Burnett, Craig R. Glenn, and Adam G. Johnson. "Quantification of point-source groundwater discharges to the ocean from the shoreline of the Big Island, Hawaii." *Limnology and Oceanography* 54, no. 3 (2009): 890-904.



Lease in Keanah Shopping Center just above the bay, is not being sustainable and using what we already have.

Please HELP SAVE Keanah Bay from becoming a big Resort area. It is one of the last historically untouched areas on the island that has not been overdeveloped and has been fully enjoyed completely by locals and visitors for many decades.

Comments for the above petition:

Reasons for signing

See why other supporters are signing, why this petition is important to them, and share your reason for signing (this will mean a lot to the signer of the petition).

Lisa Lopez| 4 days ago

Please stop building and adding more to areas that need open space...it's too crowded already.

Elizabeth A Cochran| 2 days ago

Want to save Kaniakakua Bay from being destroyed by more new developments

Gina Harvey| 2 days ago

It is important to protect small communities and special ecosystems from over development which puts too much strain on these areas.

Kathryn Mahack| 2 days ago

I live in Keanah and want to have this beautiful part of Hawaii NOT ruined. Kanehahua School sits all of the hillside behind go. It is full of coquina as brush just waiting for a fire! Take care of the land you are already supposed to be RESPONSIBLE for!

Keri Johns| 3 days ago

The people who live here and pay taxes should come first...Hawaiians should have homes first!

Judy MacDonald| 3 days ago

Keanah Bay is a historical site that should be preserved for residents and visitors use.

Glenda Jennings| 5 days ago

I have been a visitor to this location and it is perfect just the way it is!

Ladellus Sanches| 5 days ago

To keep Hawaii beautiful, and to protect our sea life.

Cyndi Wong| 6 days ago

We'lina ma'ikoi. This sacred place is the birthplace of Kaniakoa'ali, King Kanehahua III legend reigning monarch of Hawaii and should be preserved for generations to come. Please preserve Keanah Bay E milimani i kua'aina kapa. Mahalo

Terr Yoshinaga| 7 days ago

Problem: Kanehahua Schools wants Keanah Bay to become a Bungalow Resort. This is a VERY small bay. The Resort will have 105 rooms that means 200+ more people in this small area. This will have serious negative impacts on the bay like more pollution, traffic congestion, negatively affect the endangered species there and more!

Ron Dinal| 1 week ago

Ron Dinal

Kathleen Dalton| 1 week ago

Turning this into a resort will lead to overcrowding, congestion, pollution and environmental and social problems unneeded by the area to flourish and sustain life respectfully!

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Report

Jared Binkert| 1 week ago

this project is very environmentally destructive and bad for our climate.

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Report

Fran coopi| 1 week ago

The Keanah Bay should be protected as is. Keanah Bay should not be developed for the preservation of the peninsula. It would be the most of the many units for the same reason were put in such a small place. It would ruin the beauty of the bay and the habitat for the birds that live here for the benefit of all of us. In 1920 the government was established. Its main purpose was to protect the land from being sold to the people and animals who leave. We don't want it. traffic, and trash. Government is here to serve the community not promote a business that cause repurable harm to the people and animals who leave. We don't want it.

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Report

Karen Kepona| 2 weeks ago

I believe that preserving the bay is absolutely vital — this project does and do this. It will also add to traffic and increase noise for those with condos in the area.

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Report

Elizabeth Martin| 2 weeks ago

There is too much development in Keanah with no regard for the sacred spaces which are demolished for the GREED of developers. STOP ruining this beautiful sacred island!

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Report

Patrice Hunter| 2 weeks ago

Patrice Hunter

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Report

Kimber Cramer| 2 weeks ago

Kimber Cramer

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Report



Report

Lili Louigh weeks ago

We need natural wild places, and more homes

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Report

am money4 weeks ago

no more development, please

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Report

Sheri Ragnauger weeks ago

I believe that this area should be saved from development and let it continue as it... every sacred area love it as is!

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Report

Veronica Dugimet weeks ago

We need to keep our beaches and town how it is. How we grow up where our kids can grow up. We get moving forward but at the same time we need Hawaii to stay Hawaii and not make it look like Oahu.

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Report

Allison Shippard weeks ago

It's a special and sacred place! Let's protect it.

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Report

Nary Bredfo4 weeks ago

I love visiting the Big Island because of the vibe. Another big resort development will ruin this place and I'll take my tourist money elsewhere. This island cannot sustain more development. More development makes the rich richer and robs the people of the island. The environment cannot withstand more development.

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Report

Jan Ball4 weeks ago

I have come to this area for years, and it would be lovely to build yet another hotel in a time of global warming and climate change. The Outrigger can barely keep it together! No more big hotels!

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Report

Ashlee Johnson month ago

We need natural wild places, and more homes

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Report

Kanifer Suby10 month ago

So many people love enjoying the beach. It is, of course, an important part of our lives. We appreciate it as a source of joy with access to swimming and paddling and quiet times. I am certain that this will all be taken away by development that we cannot abide losing. This spot and the development of a truly sacred spot.

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Report

Janease Laswell month ago

This project is not in alignment with the general plan for Hawaii County. County residents need more affordable housing in areas already zoned for residences. County residents need more beach parks for recreation, for which this is a great location, according to the 2045 General Plan. Bishop Estate (HSBE) had the piece of this (seven lots) sold on 8/17/2022 from 1990. Enough is enough.

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Report

Cory Handren month ago

enough hotels already!

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Report

Marijorie Erway month ago

It's an inappropriate development for the area.

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Report

Louise Pope month ago

Far too much of our resources are being destroyed, we MUST save whatever is left. Money has taken us over for too much. Mahalo

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Report

Christa Morones month ago

Because is an HISTORICAL SACRED BAY!!!

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Report

Lili Louigh weeks ago

We need natural wild places, and more homes

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Report

am money4 weeks ago

no more development, please

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Report

Sheri Ragnauger weeks ago

I believe that this area should be saved from development and let it continue as it... every sacred area love it as is!

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Report

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We need to keep our beaches and town how it is. How we grow up where our kids can grow up. We get moving forward but at the same time we need Hawaii to stay Hawaii and not make it look like Oahu.

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Report

Allison Shippard weeks ago

It's a special and sacred place! Let's protect it.

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Report

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Report

Jan Ball4 weeks ago

I have come to this area for years, and it would be lovely to build yet another hotel in a time of global warming and climate change. The Outrigger can barely keep it together! No more big hotels!

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Report  
 Robert Kelparek1 month ago  
 Have you seen what the main town has done to Kealahou? It's so overcrowded you can even park! Where the people gonna go? Enough is enough already!

I  
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Report  
 Vanessa Lourenco1 month ago  
 I want the Hawaiian culture to stay alive!

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Report  
 Hana W (hawaii)2 months ago  
 Construction of hotels or places for tourists would eliminate the small businesses that are able to provide educational and fun opportunities for those visiting. Lack of tourist education can cause ignorance and destruction of the natural environment that makes Hawaii so beautiful.

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Report  
 Olivia Payne2 months ago  
 If I was in the same shoes as the beach, I would not want disrespectful people harrasing the island and treating it as a piece of trash.

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Report  
 Aubrey Featherston2 months ago  
 This is a incredibly beautiful spot and I'd hate to see it get bulldozed over and become inaccessible.

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Report  
 Jem Darr2 months ago  
 Coastal development can cause chronic sedimentation, sewage effluent, industrial discharge, changes waterflow and run off which can affect coral, contributing to climate change, increasing ocean acidification, and threatening coral reef ecosystems.

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Report  
 elliot Olive2 months ago  
 The bay needs saving!

I  
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Report  
 Amaya Dorman Mackenzie2 months ago

Think a beautiful and sacred site. Seeing the amount of unused property which already exists on the island in mid of itself was awful, but then to add yet more vacation homes to a place which has deep meaning is insensitive and shortsighted. As the description of the petition here says... Read more

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Report  
 Max Holfmann2 months ago  
 Natural beauty and animals should be protected we see too many get lost to profit!

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Report  
 Alexander Siffrey2 months ago  
 Locals can't even afford the beach. We need money and development on our schools, roads, hospitals, open space, shoreline access. Not more strain and tourism.

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Report  
 Rick Davis2 months ago  
 I live in Kohala and paddleboard almost every day in Kealahou Bay. The waters are pristine, filled with life, and uncrowded. I often see manta, dolphin, sea turtles, shark and many other kinds of fish. ... Read more

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Report  
 caroline MARONGI12 months ago  
 We don't need this resort. The island needs to stay wild and authentic. Destroying such a beautiful place is disgusting and disrespectful for the land and native .

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Report  
 Virginia Garza2 months ago  
 Virginia garza

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Report  
 Devra Dyres2 months ago  
 Big Island has very few beaches to enjoy. Don't want pockets of Honolulu scattered all around Island! Tourism has high costs for all, look what's happened to Kailua?

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Report  
 Amy Burke Marroc2 months ago

There are enough resort type developments on the West side of the Big Island already. Kona Bay is much too small and this type of development would destroy the peace and tranquility of the area. There is already a hotel and time share units in the direct vicinity. There is no need for further congestion and destruction of this sacred site.

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Report

Machiah Blake2 months ago

There is way too much tourism on island, yes it brings in money, but it also brings our residents over population, because like covid and invasive species being brought here enough already, there's no more room and it's causing way too many issues for all of us!!

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Report

Carolyn Casio2 months ago

No more development. There's a resort already, enough. Our infrastructure cannot handle more and more.

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Report

Lorri Taylor2 months ago

No more tourist based development!

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Report

William Mori2 months ago

Too much development already. Losing Hawaii identity.

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Report

sarah conti2 months ago

Kona Bay is historical sacred land.

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Report

Big Island Love2 months ago

We do not need more resorts!

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Report

Carrie Lee Hedrick year ago

This bay is beautiful and should not be changed.

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Report

Lyn Acai year ago

It's in an unnecessary location that doesn't allow our community to access the small park and beach. The coastline on each side are already difficult to get too. This is one of the last places for our picnic gatherings

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Report

Lucas Felipe1 year ago

Polo mesh ambiente

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Report

Lehman Stiel year ago

Enough of our land has been exploited for the continents money

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Report

bin ensly1 year ago

Such a small historical place leave it alone

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Report

Andrew Roberts1 year ago

This is a very special spot where you still can canoe paddle and feel like you're still living in Hawaii. Just come down and watch the kids playing in the water and fishing. This is where we beach can still just hang out.

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Report

Julia penal year ago

There are enough resorts here already, we need more diverse sustainability not resorts. Malama the Aina and the Aina will malama you.

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Report

Mary Peckel year ago

The preservation of this area historical grounds is very important.

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Report

Maddy Shyster | year ago

There are enough resorts! Save the bay

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Report

cheryl shultz | year ago

If on with my mom in which she water I can't believe that they want to displace numerous people who live in daner's and also elderly that live close by but think of the local tourism that the Big Island will loose Fat Winds and hula. Kai operate out of the pier why sentence them also I believe there is a script coming but most of they aren't you want to be bungabows is the set for Baywatch Hawaii why.

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Report

David Pinsky | year ago

stop vulcanizing

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Report

Mary De Mars | year ago

Preserve this beautiful place

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Report

Patricia Godfrey | year ago

Keanohai Bay is too small for another resort. Keanohamaha 3's bungalow should not just be a plaque in the middle of a resort.

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Report

Betty Boski | year ago

No more resorts needed, keep our beach as is.

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Report

Wayne Emby | year ago

Overdevelopment should be opposed. Developers are outnining the infrastructure and drawing too many people into areas that are already stressed. It needs to stop.

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Report

Jeanne A. Martinez | year ago

Please we do not need a big resort crowd & tourist bungalow on this sacred bungalow of King Kamehameha III to destroy the cultural activities of Native Hawaiians here.

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Report

Jane Stumlanz | year ago

Kia Hehohis should be retained as a harbor, and not turned into yet another resort.

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Report

Gayle Chavez | year ago

It is a treasure the way it is!

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Report

Aam Nanyam | year ago

Keanohai bay needs to be protected. There are enough resorts already on this island.

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Report

Alysha Kahaia | year ago

This is one of the last untouched beaches we have on Hawaii Island. I believe it should stay a sacred place because we already have other resorts and houses in the area. As a native Hawaiian with children, it makes me more appreciative of my sacred land and upbringing.

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Report

LISA Cahill | year ago

Lisa N. Cabral

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Report

Loreta Pedersen | year ago

I have been to this beautiful spot, and I remember Victor Lanes from being in Kona many years ago.

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Report  
crisdan youma2 years ago  
This is an important space for locals, and another big resort where all the profit leaves the islands is a huge step in the wrong direction for the state.

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Report  
Debbie Wareham2 years ago  
Not every square inch needs to be built on. Aole e construction.

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Report  
Valerie Wong2 years ago  
Stop over building. Especially if it's for an of town house. Hawaii should be the state of Hawaii. And change laws has to those who already do...and use that money to build affordable housing and care for the homeless, and to fund quality security, cancer and "Rapid Deploy System" for all 911 Operators. Keep Hawaii safe and beautiful. Take care of the people and the aina.

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Report  
amete otob2 years ago  
We need to preserve our coastline, their history and the wildlife for future generations, there are already too many tourist resorts on the BI, SICK AND TIRED OF GREEDY CORPORATIONS DESTROYING HALEA, ENOUGH!!

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Report  
gina kenny2 years ago  
please don't develop this sacred land

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Report  
Noelle Cowell2 years ago  
Supporting

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Report  
Mikaela Volpke2 years ago  
Supporting this to support my friend and her family 🙏.

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Report  
Jennifer Mitchell2 years ago  
We don't need any more resorts in Kealahou.

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Report  
Malia Miyasato2 years ago  
It is beautiful as is. Why let more of our beaches/days go to tourist. Why run something locals have access to

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Report  
Ronald Hoxsie2 years ago  
We don't need another resort. Keep the small town residential feeling.

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Report  
molly wallace2 years ago  
Hawaii needs to stay Hawaii - we don't need more resorts pushing the people out of Hawaii.

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Report  
Madelynn Brown2 years ago  
I am a tourist and saw what the land meant to the locals and I believe it should remain with the locals.

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Report  
Paul Koeninghofer2 years ago  
The historical and sacred place has already become over-used and abused by all the tour/ snorkel companies bringing in hundreds of tourists each day and night! Shame on the DNR for issuing permits to these greedy tour companies! More traffic at all hours, more pollution from all the mobs in the water, and also more noise and litter. We don't want to see the beautiful place go to the same fate as the other islands. We need to stop the greedy tourists from coming and the greedy companies from destroying what we left with a huge development and King Kong You want this beautiful place to turn into Maui/Kona? Save Kealahou! Save our way of life and Aiea. Too much tourism is killing Hawaii. Each year, each decade the important and beautiful spots are vanishing, to become just like any other ordinary place in the World. Don't let this happen! PK.

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Report  
bini easley2 years ago  
Please leave this bay alone it is not big enough to support 100% of tourists enough already

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 Report  
 Nick Kerridge 2 years ago  
 Keep Keahou the same & don't change a thing

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 Report  
 Marcine McBride 2 years ago  
 These developers have no right to obliterate the normal and healthy recreation area already there.

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 Report  
 Olga Elkisbay 2 years ago  
 I am signing because the land belongs to local people

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 Report  
 Robin Asgman-O'Callaghan 2 years ago  
 I am signing because these islands are too developed as is and there should be every effort to determine what areas are still relatively close to their natural settings and not just another piece for another short term rental.

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 Report  
 Cynthia Ludemann 2 years ago  
 Another sold out land for profit!!! When will enough sell out be enough????

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 Report  
 William Wood 2 years ago  
 I want to save the bay

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 Report  
 Maria Montare 2 years ago  
 Es may important!

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 Report  
 Kahoku Benson 2 years ago  
 Our Ana should stay our Akaa!

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 Report  
 Frank Rom 2 years ago  
 Worked and lived in Keauhou Bay for 24 years. It is developed enough... Keep Keauhou county.

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 Report  
 Kaylin Tamm 2 years ago  
 Communities should have a say in land use. Preserve the land for non community usage.

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 Report  
 Rebecca Roberts 2 years ago  
 This area is already overcrowded.

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 Report  
 Jessica Valencia 2 years ago  
 Leave it be! Don't need to commercialize every single beautiful place in the world.

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 Report  
 Mary E Wilson 2 years ago  
 We need to leave some of this island in its pristine condition. K Hobe is not big enough to support a tourist attraction that they are contemplating on building. Leave Keauhou Bay as it is right now.

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 Report  
 Lucia Kaplan 2 years ago  
 Keauhou Bay is a special place for native Hawaiians to connect with their cultural heritage. It is already crowded with commercial businesses. It does not need more which only brings tourists crowding the site. I'm opposed to more building projects at Keauhou Bay.

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 Report  
 Nicole Namoraz2 years ago  
 We need to keep the Aina, ANA'I

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 Report  
 Gregory effuso2 years ago  
 That would just be tragic!

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 Report  
 Dan Lucchesi2 years ago  
 More land abuse..... GOP EVIL ROTTEN BASTARDS..... August 6, 2019 Dear Americans, THE PLAGUE Ring around the polls Republicans on their toes Much to disclose Really toes  
 Tim to expose.... (published Dec. 1923) I think the Democrats for all they have done, over the 76 years of my life. We need to speak to the people about Republican hindrance and  
 Democratic legislation, spit out HOW it affected the country and "we citizens." Every time a congressman or congresswoman speak, have at least 1 example. Unstable 49 should be  
 exposed. The robber barons have been the Democratic down fall. They are the real enemies! EXPOSE Our Governments self-serving bureaucracy Corporate greed/lack of  
 responsibility regarding the failure of integrity Organized religion has misled community scores more, repeating humanity America! The land of the free? We need to get coverage  
 on the New York Times. For the sake of the world. Stop the lies.  
 P.S. Especially the police racist policies. Name the Democratic bills that are being pipetooled!

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 Report  
 Sondra Olson2 years ago  
 I am signing for all the reasons given. Hawaii does not need more commercial ventures. The true beauty & appreciation of Hawaii is in enjoying nature. Please hands-off in 20 years,  
 so many will be so grateful for that decision in an over-crowded, commercially motivated island that has displaced it's native inhabitants.

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 Report  
 Steve Faldiaz2 years ago  
 Also over profit. Listen to your hearts not your wallets

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 Report  
 Sahara Lawrenco2 years ago  
 I love aa is!

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 Report  
 Pamela Greenaway2 years ago

Keaunohu Bay can not withstand that level of development.

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 Report  
 Lisa DNialata2 years ago  
 This has been a very special place for me since 1980!

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 Report  
 calla baker2 years ago  
 We don't need any more peaceful places taken over

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 Report  
 Alice Frieri2 years ago  
 I believe we need to protect our sacred spaces. Listen to the voices of the indigenous people. Stop turning every piece of land into something marketable.

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 Report  
 Jessica Feustel2 years ago  
 Sacred ground should be kept sacred. It provides something that is hard to find in the world

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 Report  
 Robert B. Demottaz2 years ago  
 I was raised there in the early 80's and cant see beautiful Keaunohu go to some bungalowwei Lei's all fokua in keeping Keaunohu in its original beauty. I dont even have to explain but if  
 you know, you know!

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 .  
 Report  
 Nalu Friaaz2 years ago  
 That's where I grew up

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 Report  
 Cliff Keaiohu-Albarnado2 years ago  
 fuck colonization

# Help Prioritize Big Island Developments to Keep Island's Resources Safe for ALL



Started June 22, 2022  
 Petition to Rebecca Villegas and 6 others

## Why this petition matters

444 Signatures

Next Goal 500

Support now



Share on Facebook

Send an email to friends

Send a message via WhatsApp

Tweet to your followers

Copy link

0

Report

Jayden Dougherty2 years ago

This local spot should not be ruined by tourism

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Report

Karla Garcia2 years ago

This ain't right.

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Report

Megan Matthews2 years ago

bc i love my island

0

Report

Paul Howard2 years ago

No

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Report

Sarah Machado2 years ago

Please don't spoil Keahou. Or if you insist in going forward, be a zero-waste resort and give a good kamaleia pricing!

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# Save Keaouhou Bay From Becoming a Big Crowded Resort



Started  
Petition to  
April 10, 2022  
Kamehameha Schools Attention Kamika McKaigue, Principal Planner  
and 10 others

6,198 Signatures

Next Goal 7,500

135 people signed this week

Save Keaouhou Bay From Becoming a Big Crowded Resort

Share on Facebook

Send an email to friends

Send a message via WhatsApp

Tweet to your followers

Copy link

## Why this petition matters

Rebecca Melendez

To whom it may concern,

Please reject Kamehameha Schools' EIS because they have NOT followed the subpart 150. By law, they MUST do what is BEST for the Hawaiian people's cultural practices and it is proven developments WILL pollute nearby waters and if these waters get polluted, the Hawaiian people will be paddling canoes, swimming, fishing, in polluted water.

Kamehameha Schools' Bungalow Resort Development will clear land that has been protecting Keaouhou Bay from golf course runoff pollution for years, and the development will fill an entire ecosystem. The "Natural Ground Cover has 10% runoff, when a development has 55% runoff..." This was taken from NOAA's website and this researched article proves the natural land has been soaking up the above golf course pollutants before it runs into the bay for years.

SCIENTIFICALLY PROVES that development will pollute Keaouhou Bay because of the golf course runoff that will happen. "Costal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." This info is from Environmental Evidence Journal website and SCIENTIFICALLY PROVES that development KILL CORAL AND MARINE LIFE.

Please watch this video <https://www.youtube.com/watch?v=17SH4deq4A0>

In their EIS they have NOT contacted as many Hawaiian people as they NEED to contact to prove that the Hawaiian people want this bungalow resort because in the ONLY public meeting, they had in 2022 (it was on this zoom call) there were many people on this zoom call and EVERY SINGLE PERSON ON THIS ZOOM CALL OPPOSED THE BUNGALOW RESORT DEVELOPMENT and there were plenty Hawaiians on the call.

Kamehameha Schools have NOT spoken with the Kong family who are descendants from Keaouhou Bay and this video is of Kapuna Kumu Lily Kong who was born in Keaouhou Bay and she states that she is against development. She also states that her mother was against development as well. Please listen to her words in her testimonial video about Keaouhou Bay on this link and know that this proves that descendant directly from Keaouhou Bay OPPOSE THIS DEVELOPMENT <https://www.youtube.com/watch?v=9460462> and IS CULTURAL LAW THEY MUST BE HEARD AND ACKNOWLEDGED!

The laws were created, "After these legal victories, the Kohalaiki' Oluana worked to create a new law in the state of Hawaii to require Cultural Impact Statements along with Environmental Impact Statements for all future large-scale development. Act 150, the Cultural Impact Statement Law was adopted in 2006." <https://hawaii.kamehameha.org/legal-services>

Kapuna Kumu Lily Kong also states that there are burial grounds on the land that Kamehameha Schools wants to clear and it is told that Kamehameha Schools has bulldozed sacred land in the past and Keaouhou Bay's burial grounds MUST BE RESPECTED AND NOT DISTURBED!

I was also told by Hawaiians that there were bones in the small cave that is at the base of Keaouhou Bay. These burials need to take priority over a Bungalow Resort Development.

Kamehameha Schools has completely IGNORED this petition that OPPOSES their development resort in Keaouhou Bay because when I presented this petition to them, Marisa Harman told me, "Those are many signatures that AIE wants. The civic tourists that they want to visit too in their Bungalow Resort Development, and these people are signing a petition OPPOSING this resort development."

Also, please see hundreds of signatures on this petition that are the Hawaiian people and I have met Kamehameha Schools these signatures and the statements from this petition they can read what Hawaiians local and distant are saying about why they are OPPOSING their resort development and Kamehameha Schools has NOT read it considered that these comments have value in any way.

There are over 6,198 signatures as of Apr. 5th and these signatures and comments HAVE A RIGHT TO BE ACKNOWLEDGED AND THEY HAVE VALUE TO BE HEARD, THESE PEOPLE MATTER AND IT IS CULTURAL LAW THEY MUST BE ACKNOWLEDGED!

Here is the petition link [https://www.change.org/p/save-keaouhou-bay-from-becoming-a-big-crowded-resort?source=share\\_petition&utm\\_medium=custom\\_inf&recruited\\_by=4f92a5356691e9111e548450460b2ebfd](https://www.change.org/p/save-keaouhou-bay-from-becoming-a-big-crowded-resort?source=share_petition&utm_medium=custom_inf&recruited_by=4f92a5356691e9111e548450460b2ebfd)

Please read and acknowledge this petition and the 6,198 signatures (grows daily with more signatures and comments) on this petition and acknowledge the comments from the Hawaiian people, locals and tourists on this petition because I have copied ALL of comments as of today and added them below.

Petition: Save Keaouhou Bay From Becoming a Big Crowded Resort

Keaouhou Bay is historical sacred land. It's also a small commercial and quiet residential area, with a local canoe club that uses the bay daily, local volleyball groups that play there daily, families BBQ every week-end, local funeral services, baptisms local kids enjoy swimming, and visitors enjoy paddle boarding and kayaking all the time without a crowd.

Read their information on this link [https://www.kobe.edu/keaouhou\\_bay/](https://www.kobe.edu/keaouhou_bay/)

It's possibly the last untouched historical area that has not been seriously developed and it has been a comfortable and quiet bay for locals and visitors alike for many years without a big resort crowd.

The beach is just over the size of one volleyball court that is there, with an even smaller park on the other side. It doesn't have a crowded feel and it's not big enough to become a resort area.

It is also the historical site of the birthplace of the Hawaiian people's King, Kamehameha III. The area holds much history and is a very sacred area to everyone, especially the Hawaiian people.

Developers are considering building this area up and putting 1,500 Resort-style bungalows in this very historical, quiet, charming, and small commercial and residential area that many people have enjoyed as it is for many decades.

Not only is the area not big enough for a new resort, but there is also already a nice hotel at the point of this bay and Time Share homes right next to that.

Both of those work very well with this area and offer tourists a lot of fun places to stay without taking away from the land, its history, quietness, and the small commercial buildings that have been there for many years.

Updating the commercial buildings that are already there would be great, and adding a nice cultural center there would be nice for everyone as well, not just tourists having bungalows.

To have a cultural center where people can learn more about the land, and the Hawaiian people can have a place of their own at King Kamehameha III's birthplace would be great.

Creating a walkway or the disabled can get from the Northside to the Southside would be another great add, but NOT building 150 new bungalows for a lot of people who don't even live here, who will then crowd the bay because the bay will be the focus for them staying there.

Now, besides putting another resort in this area, they want to open up the old road that has been beautifully overgrown with native plants and is located just above the canoe club and goes right through King Kamehameha III's birth site.

This will bring a lot of traffic right through this beautiful historical place where many local, local family funerals, baptisms, birthday parties... it will overcrowd this very small special area that locals and visitors have been using for many decades, in many different loving ways.

Putting a road in could also increase the temperature there because of the pavement, and the traffic that will then pass through this beautiful, historical, sacred, and quiet area will be huge.

Trees shade this area right now very well and also help keep the erosion down by helping stop a lot of mud and debris from going into the ocean after big tropical storms that the island has sometimes. Without trees the bay could be extra muddy.

Plus, they want to add more commercial shops to Keaouhou Bay, and Keaouhou Shopping Center has a lot of empty For Lease stores available. To create more shops when there are shops empty and for

Lease in Keanah Shopping Center just above the bay, is not being sustainable and using what we already have.

Please HELP SAVE Keanah Bay from becoming a big Resort area. It is one of the last historically untouched areas on the island that has not been overdeveloped and has been fully enjoyed completely by locals and visitors for many decades.

Comments for the above petition:

Reasons for signing

See why other supporters are signing, why this petition is important to them, and share your reason for signing (this will mean a lot to the signer of the petition).

Lisa Lopez 1 day ago

Please stop building and adding more to areas that need open space...it's too crowded already.

Elizabeth A Cochran 2 days ago

Want to save Kaniakakua Bay from being destroyed by more new developments

Gina Harvey 2 days ago

It is important to protect small communities and special ecosystems from over development which puts too much strain on these areas.

Kathryn Mahack 2 days ago

I live in Keanah and want to have this beautiful part of Hawaii NOT ruined. Kanehahua School sits all of the hillside behind go. It is full of coquina as brush just waiting for a fire! Take care of the land you are already supposed to be RESPONSIBLE for!

Keri Johns 3 days ago

The people who live here and pay taxes should come first...Hawaiians should have homes first!

Judy MacDonald 3 days ago

Keanah Bay is a historical site that should be preserved for residents and visitors use.

Glenda Jennings 5 days ago

I have been a visitor to this location and it is perfect just the way it is!

Ladellus Sanches 5 days ago

To keep Hawaii beautiful, and to protect our sea life.

Cyndi Wong 6 days ago

Weima ma Kikon. This sacred place is the birthplace of Kaniakoaohi, King Kanehahua III legend reigning monarch of Hawaii and should be preserved for generations to come. Please preserve Keanah Bay E milimaha i kua'aina kapa. Mahalo

Terr Yoshinaga 7 days ago

Problem: Kanehahua Schools wants Keanah Bay to become a Bungalow Resort. This is a VERY small bay. The Resort will have 105 rooms that means 200+ more people in this small area. This will have serious negative impacts on the bay like more pollution, traffic congestion, negatively affect the endangered species there and more!

Ron Dinal 1 week ago

Ron Dinal

Kathleen Dalton 1 week ago

Turning this into a resort will lead to overcrowding, congestion, pollution and environmental and social problems unneeded by the area to flourish and sustain life respectfully!

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Report

Jared Binkert 1 week ago

this project is very environmentally destructive and bad for our climate.

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Report

Fran coopi 1 week ago

The Keanah Bay should be protected as is. Keanah Bay should not be developed for the preservation of the peninsula. It would be the most of the many units for the same reason were put in such a small place. It would ruin the beauty of the bay and the habitat for the birds that live here for the benefit of all of us. In 1920 the government was established. Its main purpose was to protect the land from being sold to the people and animals who leave. We don't want it. traffic, and trash. Government is here to serve the community not promote a business that cause repurable harm to the people and animals who leave. We don't want it.

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Report

Karen Keiryon 2 weeks ago

I believe that preserving the bay is absolutely vital — this project does and do this. It will also add to traffic and increase noise for those with condos in the area.

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Report

Elizabeth Martin 2 weeks ago

There is too much development in Keanah with no regard for the sacred spaces which are demolished for the GREED of developers. STOP ruining this beautiful sacred island!

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Report

Patrice Hunter 2 weeks ago

Patrice Hunter

0

Report

Kimber Cramer 2 weeks ago

Kimber Cramer

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Report

Report  
 amir1972 weeks ago

We need to stop overbuilding and destroying such delicate ecosystems.

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Report

GAZY 17th12 weeks ago

I want kamohau to remain undeveloped! Leave the area alone to be enjoyed by locals and visitors as it is!

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Report

Mitchell McKenzie2 weeks ago

I want to save the bay!

0

Report

Jennifer Lund2 weeks ago

Enough is enough. Short term financial gain is not worth it. Environmental Impact: Pollution Risk. Developments pollute nearby waters both during and after construction. Endangered Species: Habitat for Federally protected green sea turtles and endangered monk seals. Development will threaten these species due to pollution and human disturbance. Golf Course Runoff: Golf course pesticides and fertilizers lead to harmful algae blooms, killing coral and marine life. The removal of the reef acts as a natural filter that will allow golf course runoff to pollute the Bay. Increased Human Activity: More people visiting the bay will increase pollution and human activity. Water Pollution: Construction and increased human activity will disrupt marine life, particularly octopus. Stormwater Runoff: Development will increase impervious surfaces, leading to higher stormwater runoff and pollution. Sea Level Rise: Pollutants in runoff can lead to toxic sea foam affecting air quality and marine health. Scientific Evidence: NOAA & Other Studies: Phobos Decline: Pollutants from runoff kill plankton, crucial for many species, leading to ecosystem collapse. Algae Blooms: Pollution runoff causes algae blooms, smothering coral reefs and killing marine life. Ecosystem Research: Studies show significant negative impacts on marine ecosystems from development-related runoff. Legal Concerns: Endangered Species Act: Development violates the act's mandate to conserve habitats for endangered species. Hawaii Conservation Law: Local statutes require concentration of judgments against life and their ecosystems. Conservation/Markake: Federal conservation needs. Inadequate Infrastructure: Existing infrastructure cannot support additional strain from a large resort development. Waste Management: Big Island's landfill is nearing capacity and new developments will exacerbate waste issues. Water Crisis: Ongoing drought and water contamination issues make additional strain from new developments unsustainable. Power Conservation: Big Island's power plant is aging and inefficient. Existing infrastructure cannot support additional strain from a large resort development. Waste Management: Big Island's landfill is nearing capacity and new developments will exacerbate waste issues. Hawaiian Islands: Existing research shows developments lead to severe degradation of coral reefs and marine life. Global Examples: Similar coastal developments worldwide have resulted in long-term environmental damage. Community Impact: Local Use: Kaulaou Bay is a popular spot for local activities such as boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. Tourist Impact: Increased tourist activity will further degrade natural resources and disturb local wildlife. Economic Considerations: Reliance on Tourism: Long-Term Costs: Environmental degradation will lead to long-term economic costs, outweighing short-term development gains. Conclusion: Long-Term Impact: Allowing the bungalow resort will permanently alter and likely destroy Kaulaou Bay's ecosystem. Conservation Priority: Emphasis on conserving the bay as a natural habitat for endangered species and marine life. Community Responsibility: Uge decision-makers to consider the long-term environmental, economic, and community impacts before approving the development.

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Report

Ann Edahabar2 weeks ago

This is sacred land. There's enough going on already on the bay so leave it alone. I am very concerned about reefs and more water pollution. This is a terrible idea.

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Report

Yemaya Indira Duby2 weeks ago

Save this fragile eco-system!

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Report

Ric Cranky2 weeks ago

Very concerned & opposed to more tourist accommodations as we face less and less housing. Greedy developers, enough is enough!

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Report

Lori Seawick2 weeks ago

We do not need nor want this kind of development!

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Report

Aime Yelker2 weeks ago

Saved land should be protected and kept pristine. Keep the Bay intact with its beauty and historical value. Leave it as it is!

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Report

marsha stafford2 weeks ago

We do not have the roads nor infrastructure for more development

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Report

Stephane Kuitick1 weeks ago

Over development on the island has already lead to destruction of coral reefs and natural ... Read more

0

Report

Barbara Jossy3 weeks ago

Too much development already.

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Report

gally count3 weeks ago

I am signing it because I grew up there and it is our gramma land Victoria kammalahe She never relinquished it

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Report

Lili Louigh weeks ago

We need natural wild places, and more homes

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Report

am money4 weeks ago

no more development, please

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Report

Sheri Ruggenberg weeks ago

I believe that this area should be saved from development and let it continue as it... every sacred area love it as is!

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Report

Veronica Dugimet weeks ago

We need to keep our beaches and town how it is. How we grow up where our kids can grow up. We get moving forward but at the same time we need Hawaii to stay Hawaii and not make it look like Oahu.

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Report

Allison Shippard weeks ago

It's a special and sacred place! Let's protect it.

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Report

Nary Bredfo4 weeks ago

I love visiting the Big Island because of the vibe. Another big resort development will ruin this place and I'll take my tourist money elsewhere. This island cannot sustain more development. More development makes the rich richer and robs the people of the island. The environment cannot withstand more development.

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Report

Jan Ball4 weeks ago

I have come to this area for years, and it would be lovely to build yet another hotel in a time of global warming and climate change. The Outrigger can barely keep it together! No more big hotels!

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Report

Ashlee Johnson month ago

We need natural wild places, and more homes

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Report

Kanifer Suby10 month ago

So many people love enjoying the beach. It is, of course, an important part of our lives. We appreciate it as a scenic spot with access to swimming and paddling and quiet times. I am certain that this will all be taken away by development that we cannot shake being this special the development of a truly sacred spot.

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Report

Janease Laswell month ago

This project is not in alignment with the general plan for Hawaii County. County residents need more affordable housing in areas already zoned for residences. County residents need more beach parks for fire recreation, for which this is not a good use. Bishop Estate (HSBE) had the piece of this (seven times) before on B11 in 2002 from 1990. Enough is enough.

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Report

Cory Handren month ago

enough hotels already!

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Report

Marijorie Erway month ago

It's an inappropriate development for the area.

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Report

Louise Pope month ago

Far too much of our resources are being destroyed, we MUST save whatever is left. Money has taken us over for too much. Mahalo

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Report

Christa Mermes month ago

Because is an HISTORICAL SACRED BAY!!!

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Report

Lili Louigh weeks ago

We need natural wild places, and more homes

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Report

am money4 weeks ago

no more development, please

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Report

Sheri Ruggenberg weeks ago

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Report

Veronica Dugimet weeks ago

We need to keep our beaches and town how it is. How we grow up where our kids can grow up. We get moving forward but at the same time we need Hawaii to stay Hawaii and not make it look like Oahu.

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Report

Allison Shippard weeks ago

It's a special and sacred place! Let's protect it.

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Report

Nary Bredfo4 weeks ago

I love visiting the Big Island because of the vibe. Another big resort development will ruin this place and I'll take my tourist money elsewhere. This island cannot sustain more development. More development makes the rich richer and robs the people of the island. The environment cannot withstand more development.

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Report

Jan Ball4 weeks ago

I have come to this area for years, and it would be lovely to build yet another hotel in a time of global warming and climate change. The Outrigger can barely keep it together! No more big hotels!

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Report  
 Robert Kelparek1 month ago  
 Have you seen what the main town has done to Kealahou? It's so overcrowded you can even park! Where the people gonna go? Enough is enough already!

I  
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Report  
 Vanessa Lourenco1 month ago  
 I want the Hawaiian culture to stay alive

I  
 .

Report  
 Hana W (hawaii)2 months ago  
 Construction of hotels or places for tourists would eliminate the small businesses that are able to provide educational and fun opportunities for those visiting. Lack of tourist education can cause ignorance and destruction of the natural environment that makes Hawaii so beautiful.

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Report  
 Olivia Payne2 months ago  
 If I was in the same shoes as the beach, I would not want disrespectful people harrasing the island and treating it as a piece of trash

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Report  
 Aubrey Featherstone2 months ago  
 This is a incredibly beautiful spot and I'd hate to see it get bulldozed over and become inaccessible

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Report  
 Jem Darr2 months ago  
 Coastal development can cause chronic sedimentation, sewage effluent, industrial discharge, changes waterflow and run off which can affect coral, contributing to climate change, increasing ocean acidification, and threatening coral reef ecosystems.

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Report  
 elliot Olive2 months ago  
 The bay needs saving

I  
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Report  
 Amaya Dorman Mackenzie2 months ago

Think a beautiful and sacred site. Seeing the amount of unused property which already exists on the island in mid of itself (I was afraid, but then to add yet more, vacation homes to a place which has deep meaning is insensitive and shortsighted. As the description of the petition here says... Read more

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Report  
 Max Holfmann2 months ago  
 Natural beauty and animals should be protected we see too many get lost to profit!

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Report  
 Alexander Siffrey2 months ago  
 Locals can't even afford the beach. We need money and development on our schools, roads, hospitals, open space, shoreline access. Not more strain and tourism

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Report  
 Rick Davis2 months ago  
 I live in Kohala and paddleboard almost every day in Kealahou Bay. The waters are pristine, filled with life, and uncrowded. I often see manta, dolphin, sea turtles, shark and many other kinds of fish. ... Read more

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Report  
 caroline MARONGI12 months ago  
 We don't need this resort. The island needs to stay wild and authentic. Destroying such a beautiful place is disgusting and disrespectful for the land and native .

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Report  
 Virginia Garza2 months ago  
 Virginia garza

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Report  
 Devra Dyres2 months ago  
 Big Island has very few beaches to enjoy. Don't want pockets of Honolulu scattered all around Island! Tourism has high costs for all, look what's happened to Kailua?

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Report  
 Amy Burke Marroc2 months ago

There are enough resort type developments on the West side of the Big Island already. Kona Bay is much too small and this type of development would destroy the peace and tranquility of the area. There is already a hotel and time share units in the direct vicinity. There is no need for further congestion and destruction of this sacred site.

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Report

Machiah Blake2 months ago

There is way too much tourism on island, yes it brings in money, but it also brings our residents over population, because like covid and invasive species being brought here enough already, there's no more room and it's causing way too many issues for all of us!!

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Report

Carolyn Casio2 months ago

No more development. There's a resort already. Enough. Our infrastructure cannot handle more and more.

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Report

Lorri Taylor2 months ago

No more tourist based development!

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Report

William Mori2 months ago

Too much development already. Losing Hawaii identity.

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Report

sarah conti2 months ago

Kona Bay is historical sacred land.

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Report

Big Island Love2 months ago

We do not need more resorts!

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Report

Carrie Lee Hedrick year ago

This bay is beautiful and should not be changed.

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Report

Lyn Acaal year ago

It's in an unnecessary location that doesn't allow our community to access the small park and beach. The coastline on each side are already difficult to get too. This is one of the last places for our picnic gatherings

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Report

Lucas Felipe1 year ago

Polo mesh ambiente

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Report

Lehman Stiel1 year ago

Enough of our land has been exploited for the continents money

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Report

bin ensloy1 year ago

Such a small historical place leave it alone

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Report

Andrew Roberts1 year ago

This is a very special spot where you still can canoe paddle and feel like you're still living in Hawaii. Just come down and watch the kids playing in the water and fishing. This is where we locals can still just hang out.

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Report

Julia penul year ago

There are enough resorts here already, we need more diverse sustainability not resorts. Malama the Aina and the Aina will malama you.

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Report

Mary Peckel1 year ago

The preservation of this area historical grounds is very important.

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Report

Maddy Shyster | year ago

There are enough resorts! Save the bay

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Report

cheryl shultz | year ago

If I go with my mom in which she water I can't believe that they want to displace numerous people who live in daner's and also elderly that live close by but think of the local tourism that the Big Island will loose Fat Winds and hula. Kai operate out of the pier why sentence them also I believe there is a script coming but most of they aren't you want to be bungabows is the set for Baywatch Hawaii why.

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Report

David Pinsky | year ago

stop vulcanizing

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Report

Mary De Mars | year ago

Preserve this beautiful place

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Report

Patricia Godfrey | year ago

Keanohai Bay is too small for another resort. Keanohamaha 3's bungalow should not just be a plaque in the middle of a resort.

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Report

Betty Boski | year ago

No more resorts needed, keep our beach as is.

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Report

Wayne Emby | year ago

Overdevelopment should be opposed. Developers are outnining the infrastructure and drawing too many people into areas that are already stressed. It needs to stop

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Report

Jeanne A. Martinez | year ago

Please we do not need a big resort crowd & tourist bungalow on this sacred bungalow of King Kamehameha III to destroy the cultural activities of Native Hawaiians here.

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Report

Jane Stamland | year ago

Kia Hehaha should be retained as a harbor, and not turned into yet another resort.

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Report

Gayle Chavez | year ago

It is a treasure the way it is!

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Report

Aam Nanyam | year ago

Keanohai bay needs to be protected. There are enough resorts already on this island.

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Report

Alysha Kahaia | year ago

This is one of the last untouched beaches we have on Hawaii Island. I believe it should stay a sacred place because we already have other resorts and houses in the area. As a native Hawaiian with children, it makes me more appreciative of my sacred land and upbringing.

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Report

LISA Cahill | year ago

Lisa N. Cabral

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Report

Loreta Pedersen | year ago

I have been to this beautiful spot, and I remember Victor Lanes from being in Kona many years ago.

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Report  
crisdan youma2 years ago  
This is an important space for locals, and another big resort where all the profit leaves the islands is a huge step in the wrong direction for the state.

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Report  
Debbie Wareham2 years ago  
Not every square inch needs to be built on. Aole e construction.

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Report  
Valerie Wong2 years ago  
Stop over building. Especially if it's for an of town house. Hawaii should be the state of Hawaii. And change laws has to those who already do...and use that money to build affordable housing and care for the homeless, and to fund quality security, cancer and "Rapid Deploy System" for all 911 Operators. Keep Hawaii safe and beautiful. Take care of the people and the aina.

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Report  
amete otob2 years ago  
We need to preserve our coastline, their history and the wildlife for future generations, there are already too many tourist resorts on the BI, SICK AND TIRED OF GREEDY CORPORATIONS DESTROYING HALEA, ENOUGH!!

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Report  
gina kenny2 years ago  
please don't develop this sacred land

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Report  
Noelle Cowell2 years ago  
Supporting

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Report  
Mikaela Volpke02 years ago  
Supporting this to support my friend and her family 🙏.

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Report  
Jennifer Mitchell12 years ago  
We don't need any more resorts in Kealahou.

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Report  
Malin Miyasato2 years ago  
It is beautiful as is. Why let more of our beaches/days go to tourist. Why run something locals have access to

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Report  
Ronald Hoxsie2 years ago  
We don't need another resort. Keep the small town residential feeling.

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Report  
molly wallace2 years ago  
Hawaii needs to stay Hawaii - we don't need more resorts pushing the people out of Hawaii.

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Report  
Madelynn Brown2 years ago  
I am a tourist and saw what the land meant to the locals and I believe it should remain with the locals.

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Report  
Paul Koeninghofer2 years ago  
The historical and sacred place has already become over-used and abused by all the tour/ snorkel companies bringing in hundreds of tourists each day and night! Shame on the DNR for issuing permits to these greedy tour companies! More traffic at all hours, more pollution from all the mobs in the water, and also more noise and litter. We don't want to see the beautiful place go to hell. We don't want to see the beautiful place destroyed what is left with a huge development and King Kong You want this beautiful place to turn into MauiKona? Save Kealahou! Save our way of life and Aiea. Too much tourism is killing Hawaii. Each year, each decade the important and beautiful spots are vanishing, to become just like any other ordinary place in the World. Don't let this happen PK.

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Report  
bini easley2 years ago  
Please leave this bay alone it is not big enough to support 100% of tourists enough already

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 Report  
 Nick Kerridge 2 years ago  
 Keep Keahou the same & don't change a thing

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 Report  
 Marcine McBride 2 years ago  
 These developers have no right to obliterate the normal and healthy recreation area already there.

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 Report  
 Olga Ekstrand 2 years ago  
 I am signing because the land belongs to local people

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 Report  
 Robin Asgman-O'Callaghan 2 years ago  
 I am signing because these islands are too developed as is and there should be every effort to determine what areas are still relatively close to their natural settings and not just another piece for another short term rental.

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 Report  
 Cynthia Ludemann 2 years ago  
 Another sold out land for profit!!! When will enough sell out be enough????

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 Report  
 William Wood 2 years ago  
 I want to save the bay

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 Report  
 Maria Montare 2 years ago  
 Es may important!

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 Report  
 Kahoku Benson 2 years ago  
 Our Ana should stay our Akaa!

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 Report  
 Frank Rom 2 years ago  
 Worked and lived in Keauhou Bay for 24 years. It is developed enough... Keep Keauhou county.

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 Report  
 Kaylin Tamm 2 years ago  
 Communities should have a say in land use. Preserve the land for non community usage.

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 Report  
 Rebecca Roberts 2 years ago  
 This area is already overcrowded.

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 Report  
 Jessica Valencia 2 years ago  
 Leave it be! Don't need to commercialize every single beautiful place in the world.

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 Report  
 Mary E Wilson 2 years ago  
 We need to leave some of this island in its pristine condition. K Hobe is not big enough to support a tourist attraction that they are contemplating on building. Leave Keauhou Bay as it is right now.

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 Report  
 Lucia Kaplan 2 years ago  
 Keauhou Bay is a special place for native Hawaiians to connect with their cultural heritage. It is already crowded with commercial businesses. It does not need more which only brings tourists crowding the site. I'm opposed to more building projects at Keauhou Bay.

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 Report  
 Nicole Namoraz2 years ago  
 We need to keep the Aina, ANA'I

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 Report  
 Gregryrillusoz2 years ago  
 That would just be tragic!

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 Report  
 Dan Lucchesi2 years ago  
 More land abuse..... GOP EVIL ROTTEN BASTARDS..... August 6, 2019 Dear Americans, THE PLAGUE Ring around the polls Republicans on their toes Much to disclose Really toes  
 Tim to expose.... (published Dec. 1923) I think the Democrats for all they have done, over the 76 years of my life. We need to speak to the people about Republican hindrance and  
 Democratic legislation, spit out HOW it affected the country and "we citizens." Every time a congressman or congresswoman speak, have at least 1 example. Unstable 49 should be  
 exposed. The robber barons have been the Democratic down fall. They are the real enemies! EXPOSE Our Governments self-serving bureaucracy Corporate greed/lack of  
 responsibility regarding the failure of integrity Organized religion has misled community scores more, repeating humanity America! The land of the free? We need to get coverage  
 on New York, Florida, California, Hawaii, and the rest of the world. Stop the lies.  
 P.S. Especially the police racist policies. Name the Democratic bills that are being pipetooled!

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 Report  
 Sondra Olson2 years ago  
 I am signing for all the reasons given. Hawaii does not need more commercial ventures. The true beauty & appreciation of Hawaii is in enjoying nature. Please hands-off in 20 years,  
 so many will be so grateful for that decision in an over-crowded, commercially motivated island that has displaced it's native inhabitants.

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 Report  
 Syley Faldiaz2 years ago  
 Also over profit. Listen to your hearts not your wallets

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 Report  
 Sahana Lawrenoz2 years ago  
 I love as i!

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 Report  
 Pamela Greenaway2 years ago

Keaunohu Bay can not withstand that level of development.

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 Report  
 Lisa DNialata2 years ago  
 This has been a very special place for me since 1980!

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 Report  
 callia baker2 years ago  
 We don't need any more peaceful places taken over

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 Report  
 Alice Frieri2 years ago  
 I believe we need to protect our sacred spaces. Listen to the voices of the indigenous people. Stop turning every piece of land into something marketable.

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 Report  
 Jessica Feustel2 years ago  
 Sacred ground should be kept sacred. It provides something that is hard to find in the world

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 Report  
 Robert B. Demottaz2 years ago  
 I was raised there in the early 80's and cant see beautiful Keaunohu go to some bungalowel Let's all fokua in keeping Keaunohu in its original beauty. I dont even have to explain but if  
 you know, you know!

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 Report  
 Nalu Friaaz2 years ago  
 That's where I grew up

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 Report  
 Clair Keaiohu-Albarnoz2 years ago  
 fuck colonization

# Help Prioritize Big Island Developments to Keep Island's Resources Safe for ALL



Started June 22, 2022  
 Petition to Rebecca Villegas and 6 others

## Why this petition matters

444 Signatures

Next Goal 500

Support now



Share on Facebook

Send an email to friends

Send a message via WhatsApp

Tweet to your followers

Copy link

0

Report

Jayden Dougherty2 years ago

This local spot should not be ruined by tourism

0

Report

Karla Garcia2 years ago

This ain't right.

0

Report

Megan Matthews2 years ago

bc i love my island

0

Report

Paul Howard2 years ago

No

0

Report

Sarah Machado2 years ago

Please don't spoil Keahou. Or if you insist in going forward, be a zero-waste resort and give a good kamaeiea pricing!

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## Summary of the Water Quality Research from Kahalu'u Bay, Hawai'i Island: Tidal Flows, Recreation Water Indicator Bacteria, and Nutrient Fluxes

R.H. Bennett Ph.D.<sup>1</sup>, and K. M. Clark<sup>2</sup>

The Kahalu'u Bay Education Center (a program of The Kohala Center) actively strives to inform visitors and the community about the protection and conservation of the bay's marine ecosystem. A group of committed volunteers and staff provide daily, on-site educational programs. Similarly, they have collected scientific data about the bay for over a decade. This trove of data is priceless. It tells us much about the interaction of the ocean with the adjacent urban lands. Except for the marine waters of Kaloko Honokōhau National Historical Park, no other maritime site in Kona has been studied so thoroughly and for so long.

The data from Kahalu'u Bay gave rise to three technical research reports. They are:

- I. Tidal Influence on Temperature and Salinity
- II. Elevated Kahalu'u Bay Enterococci Associated with Large Tidal Flux
- III. Kahalu'u Bay Nutrient Trends 2009 to 2019

The purpose of this summary is to provide an easy-to-understand synopsis of the three technical reports to enable the community to "see below sea level" so that we may be better informed of the best stewardship of our nearshore waters.

### I. Tidal and Ground Water Influence on Bay Waters

The mountains above Kailua Kona are blessed with abundant rainfall. Some sites get over 70 inches of rain per year. Yet there are no rivers or streams. On the Hilo side of the island, there are over 200 streams. So, in Kona, where does all that water go? It percolates quickly through the fractured lava rock and forms a fresh groundwater lens that floats upon the seawater that permeates the island. From there, fresh groundwater flows toward the shore. It includes a nearshore subterranean estuary (STE). In the estuary, groundwater and seawater mix under the forces of tidal action. Four times a day, the tides rise and fall. During the Spring Tides, massive tidal fluxes of over two feet push and pull on the estuary with great force.

Groundwater eventually discharges along the coast as a cold mixture of fresh water and recirculated seawater. For those that swim in the ocean, encountering cold spots is inevitable. For snorkelers, these surface cold spots can have hazy visibility. This is a refraction caused by the incomplete mixing of seawater and groundwater. The fresher water is less dense and floats on the ocean surface in many locations.

<sup>1</sup> Applied Life Sciences LLC, and Waiwai Olo Ohana

<sup>2</sup> The Kahalu'u Bay Education Center, The Kohala Center

There is more recent data available for this waterbody. Please use the following link to view the latest information:  
[View Waterbody Report for 2024 \(opens new browser tab\)](#)

### Kahalu'u Bay (Kona)

Assessment Unit ID: 10711250

Waterbody Condition: [Impaired \(Issue Identified\)](#)

Existing Plans for Restoration: No

303(d) Listed: Yes

Year Reported: 2020

Other Years Reported: 2016, 2018, 2022, 2024 (opens new browser tab)

Organization Name (ID): Hawaii (2146)

What type of water is this?  
Bay (0.00 Square Miles)

Where is this water located?  
Hawaii



### Assessment Information from 2020

State or Tribal Nation specific, designated uses:  
Information on Water Quality Standards

Aquatic Life

Recreation

Probable sources contributing to impairment from 2020:  
No probable sources of impairment identified for this waterbody.

Assessment Documents  
No documents are available

Plans to Restore Water Quality

What plans are in place to protect or restore water quality:  
No plans specified for this waterbody.

### Glossary

Impaired Waters

Impaired Waters

Definition  
Waterbodies are waterbodies not fully supporting their designated uses under the Clean Water Act.

In the Kāhala'u Bay shore area, there are pronounced discrete locations where water flows can be seen, and the coolness is perceived. In other places, the brackish water is more diffuse. And yet, in some offshore sites, the cold brackish water emerges from the floor of the ocean. Most of all, water that does not evaporate flows into the sea one way or another. Water is almost a perfect solvent. A high number of things dissolve in it even though it may remain crystal clear. In the kitchen, we can dissolve a lot of salt or sugar in a glass of water without changing its appearance.

Figure 1. Kāhala'u Bay Shoreline Sample Sites

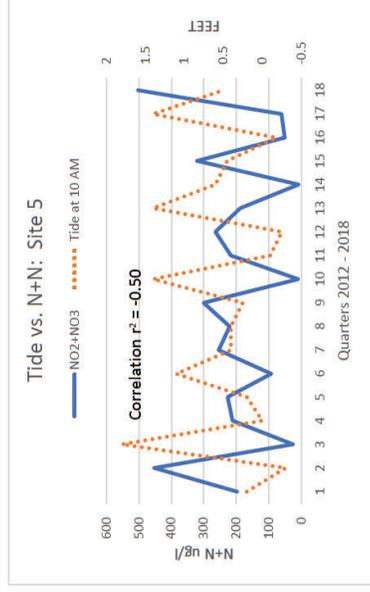


This site map of the bay shows where water samples are collected. Site one is where water flow at low tide can be seen. At low tide, the salinities at site 1 differed from the others. At high tide, the salinity of sites 1 - 4 was different from 5. This shows that water inflow can be very localized. We know that lava tubes and fractured rock can provide such a discrete conveyance.

Similarly, it should not be too hard to imagine how the flow of the tides can influence the

temperature of the nearshore water. Ocean water is warmer and more saline. Thus, a good high tide will render the nearshore water warmer and saltier. At a very low tide, the converse is also true.

Figure 2. The Influence of Tides on Nitrogen Concentration.



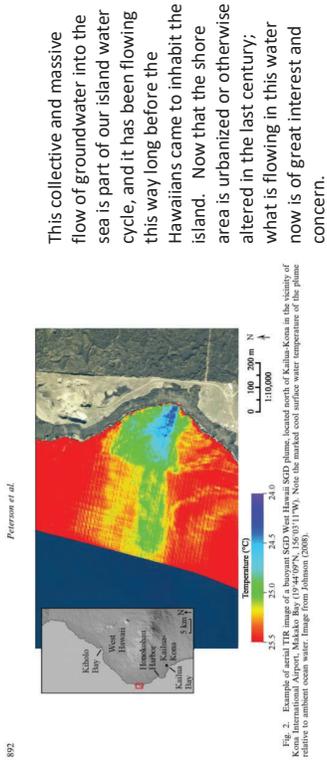
At low tide, groundwater flows increase, and salinity and temperature decrease quite dramatically. This suggests the volume of water flowing into the bay is massive. As shown in Figure 2., over a 4.5-year period, there is an inverse relationship between the tide level and the concentration of Nitrogen (N) measured as Nitrate and Nitrite. The effect is simply seawater, that is lower in Nitrogen (N) is diluting the higher N groundwater Nitrogen content. Thus, it is critical that tidal effects be accounted for in any monitoring of marine nitrogen. Accounting for groundwater Nitrogen concentrations flowing into near shore waters is a requirement of Hawai'i Administrative Rules when conducting water tests.<sup>3</sup>

UH researchers using some advanced chemistry with Radon isotopes, estimate for each mile of the Kona Coastline between one to three million gallons of groundwater flow into the sea per mile of coastline per day. On the Hilo side, the flow of water from the land can be seen in rivers and streams. On the Kona side, it is unseen but still vast in many submarine groundwater discharges.

One way we can see this flow is to use cameras that see temperature, called infra-red (IR). This IR photo was taken of a submarine groundwater discharge, just north of the Kona Airport. The cold, fresh water (shown by the cooler colors in the image) extends over 200 yards out to sea.

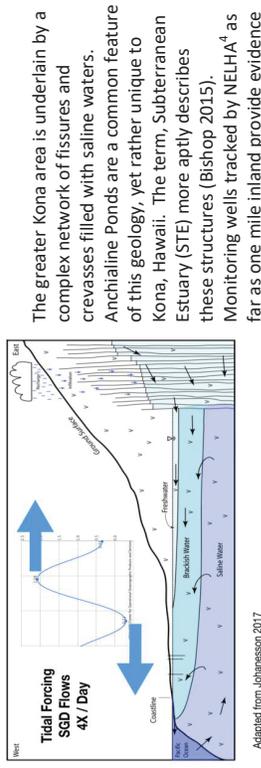
<sup>3</sup> Hawai'i Administrative Rules §11-54-6(B)

Figure 3. Thermal Image of a Prominent Submarine Groundwater Discharge. Adapted from Johnson (2008)



The take-home story in this section is that groundwater flows dramatically alter the nearshore ocean and it's easily detected and measured with simple instruments like a thermomometer or salinity meter. This will take on greater significance in Part II.

Figure 4. The Tidal Forces that Drive the Subterranean Estuary (STE) on the Kona Shore.



The greater Kona area is underlain by a complex network of fissures and crevasses filled with saline waters. Anchialine Ponds are a common feature of this geology, yet rather unique to Kona, Hawaii. The term, Subterranean Estuary (STE) more aptly describes these structures (Bishop 2015). Monitoring wells tracked by NELHA<sup>4</sup> as far as one mile inland provide evidence of seawater intrusion and water levels consistent with tidal action (Peterson 2009). This fact is largely unrecognized by the state as well as the community. The implications are profound. Marine waters of the Kona Coast communicate with ground water well inland and vice versa. Nonetheless, wastewater discharges to land in this region are likely to be impacting the waters of the coast and circumventing requirements for the regulation of such waste discharges to the waters of the United States.<sup>5</sup>

<sup>4</sup> NELHA CEMP Report <https://nelha.hawaii.gov/resources/library/nelha-lab-reports/>  
<sup>5</sup> *Cty. of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462, 1476 (Apr. 23, 2020)

## II. Influence of Tides on the Recreation Safety Bacterial Water Quality Indicator

When the local news recently (Jan 8, 2019) reported several beaches on Oahu were closed due to elevated Enterococci (ENT) indicator bacteria, and Kahalu'u Bay was "Posted" by the Health Department of Hawai'i, at about the same time. These events raised curiosity. There had been no significant rain events on the islands, and no sewer spills to cause health department warnings. Instead, the warnings arose for beaches widely separated geographically and simply because the levels of ENT were elevated above the regulatory threshold.

The State Department of Health monitors the indicator bacteria Enterococci (ENT). The official belief was that ENT was a useful marker for fecal contamination. A lot of science has shown that it is not a valid indicator, nonetheless, it is still the official test (Boehm 2009). This ENT monitoring data is part of the Kahalu'u Bay collection. When the Bay was posted as contaminated in January, it generated posed a question. We were having colossal Spring Tides at the time. Could the tides have something to do with the bacteria levels? The bottom line is indeed they do. But how?

The ENT bacteria are common to land and water sources even where there is no fecal matter at all. They grow in wet places like culverts, compost piles, drainpipes, and wetlands. From there they flow into the sea, and they make a home there too. They can be found floating in the seawater, and that is where the state measures them. But more critically, they live and grow in wet beach sand above and below water level. Many times, more ENT can be found in the beach sand than in the water above.

Figure 5. How Tidal Circulation at the Shore Conveys Indicator Bacteria to the Water Column (Lee 2017)

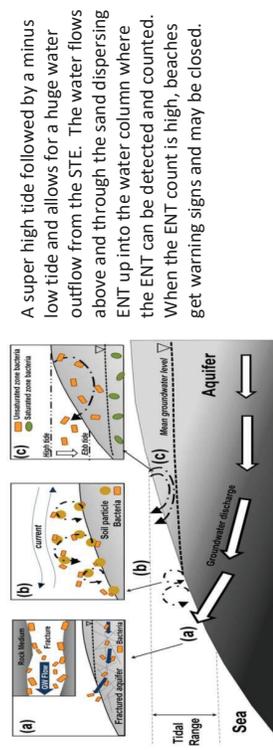
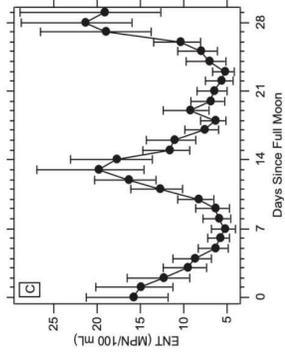


Figure 6. Lunar – Tidal Influence on Marine Water Enterococci (Boehm 2005)



This graph shows the ENT count and the moon cycle. Fourteen days after a full moon are the astronomical Spring Tides and associated rise in the ENT. This tidal force literally stirs things up.

There remains a distinct possibility that elevated ENT counts are often an artifact of the tide cycle at the time of sampling. This bias likely triggers official warnings where there is no apparent health risk events like sewage spills or flooding.

However, given that the region near Kahalu'u Bay is not served by sewer and most homes have utilized cesspits for decades, sewage components may be conveyed to the ocean by groundwater. Microbiologists have documented the presence of human virus in seawater when the ENT is low or absent. The need for a better risk indicator is great. Stable chemical indicators of sewage such as Sucralose (Bennett 2021) and an MRI diagnostic marker (Johannesson 2017) show promise in wastewater tracking research conducted in Hawaii Island.

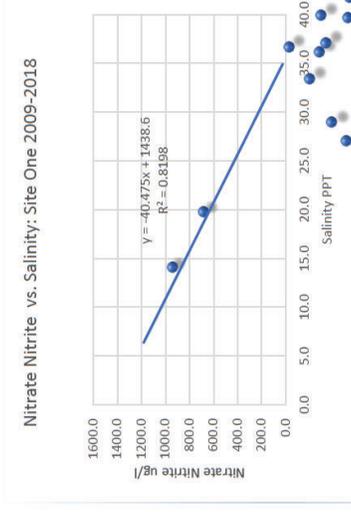
The real good news about the safety of recreation water in Hawaii is the sun. The intense midday UV sunlight penetrates clear water and kills microbes in a matter of hours. We shall see, however, in the next section, clear ocean water is less common these days.

### III. The Nutrients Nitrogen and Phosphorus in Nearshore Groundwater<sup>6</sup>

It is well established that brackish groundwater flowing in discrete and diffuse STE is abundant in the nutrient's nitrogen and phosphorus. According to University of Hawai'i researchers, wherever there is cold STE water flows, elevated nutrients are present (Johnson 2008). These flows result in thousands of pounds of the nutrients being conveyed daily to the nearshore waters. Tropical water ecosystems are naturally low in nutrients (De Goeij 2013), and yet corals have adaptations to these conditions. Unfortunately, decades of human derived nutrients in the ocean nourish algal biomass expansion to the detriment of the corals.

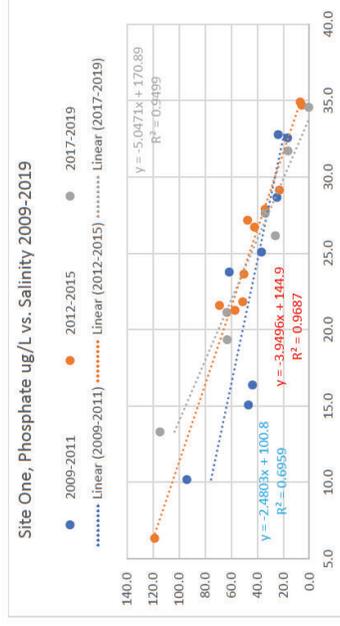
<sup>6</sup> All nutrient analysis performed by the certified laboratory at NELHA

Figure 7. Nitrate-Nitrite Relationship to Salinity



This graph looks complicated, but it's not. Let's interpret. The line says, when sea water is saltier there is less N in it. Conversely, the fresher the water the higher N is there. Taken over 10 years in many locations in the bay and from other Kona Coast sites, this pattern is very consistent. Simply, it means the elevated N source is from the land and not from groundwater and not from the sea.

Figure 8. Phosphate Relationship to Salinity



This chart looks even more complicated, but it is just three sets of years P plotted against salinity. It shows a very similar relationship as the N chart. Yet here we are looking at a ten-year period in three phases. It answers the question, are things changing over time? For both N and P there is no evidence of a time trend. The nutrient concentrations in groundwater are staying about the same.

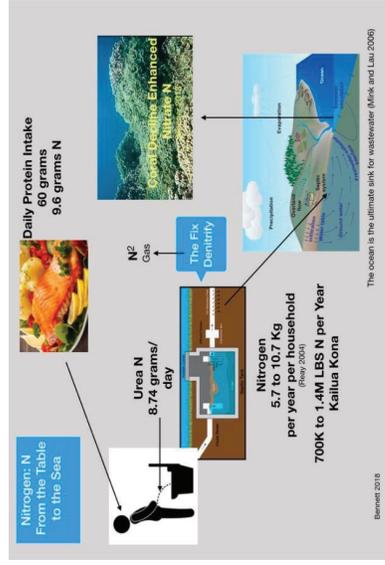
Just as for salinity and temperature in the first report, tidal action dilutes the groundwater and hence the N concentration (Fig. 2). Thus, if one was trying to say there is no problem or a lesser problem, the sample would be collected at the highest tide to get the lowest N level. In all future work, we must account for the tidal effect on nutrient concentration in nearshore waters.

A very large mass of the nutrients, N, and P, flow into the ocean for almost the entire Kona Coastline. Some have conveniently wanted to say the N and the P are natural, meaning this system was here before humans. While it is true, the mass of nutrients was far, far less as there was little importation of nutrients other than through fish consumption.

Given that, what is the reason for the large mass of nutrients? We are! A lot of research on this island and others shows very clearly that the N and P are from human activity. We say the elevated nutrients are anthropogenic, or human-associated. This includes the fertilizers imported and dispersed in landscape and agriculture. Yet the largest single source is the human diet and the nutrients we excrete daily.

For example, protein-rich foods contain much more N than starchy foods and vegetables. The proteins get absorbed and ultimately broken down and the nitrogen is excreted in the urine as urea. Leave urine in the bowl for a day and the bacteria break it down and form ammonia with its distinctive odor. In the environment, bacteria convert ammonia to nitrate. It is the same nitrate found in a bag of lawn fertilizer.

Figure 9. A Simple Mass Balance for Human Dietary Nitrogen Marine Impact



This fertilizer in the sea has the same effect as it does on your lawn. Instead of grass growing, the microscopic green plant microbes called phytoplankton grow and in high numbers make the

water shades of cloudy green. This growth absorbs sunlight making the natural UV disinfection of seawater less effective. Ecosystem research from Kaneohe Bay demonstrates that wastewater N in the bay has an additive effect with increased temperature to cause greater coral bleaching (Tanaka 2013).

Figure 10. Nitrogen Mass Dependent on Ground Water Flow Volume



Lastly, it is not sufficient just to know the concentration of the nutrient flowing into the bay as it tells us nothing of the mass or pounds in the flow. Thus, we must know or estimate the volume of the flow so that we can calculate the mass of nutrients delivered to the sea from the STE.

The blue arrows represent the same nutrient yet at very different flow volumes. The total mass of N, reaching the bay and impacting the ecosystem is very different. Where currents move and mix these nutrients to the open ocean, adverse impacts are less likely.

However, in protected embayments like Kahu'u, the transport and mixing is much less and the impact on the local ecosystem is more significant.

Think of it this way. A little soy sauce on food gives it just the right salt taste, but add a quarter cup of soy sauce on food and it becomes horribly salty. The salt in the soy is at the same concentration; there was simply more salt.

In the bay, we cannot alter the volume of water flowing in, just like we cannot stop a river. So, we need to employ the tools that reduce the concentration of N and P discharged to groundwater.

The people of Long Island NY, Cape Cod MA, and coastal Florida have severely polluted their estuaries from Septic Systems. The environmental and economic consequences are monumental. The residents put their collective shoulders to the wheel and financed solutions research. That research demonstrated a simple technique that removes the nutrients in human wastewater by over 90%. The states are implementing the "Layer Cake-Nitrogen Reducing Biosystem leach field. Kona can do this too. The consequences of "kicking the can down the road" will be dire. Sustainable Hawai'i must be our goal.

For over 35 years, Dr. Bennett has worked in the environmental science field where the land meets the water. From Tomales Bay CA, to New South Wales Australia to the Big Island wherever there are people and oceans there are huge challenges. A resident of Kona since 1999, he serves as Na Mako O Ke Kai (eyes of the sea) for the Kona Coast Waterkeeper-Waiwai Oia Ohana.

#### Acknowledgments

Special appreciation goes out to Cindi Punihaole Kennedy, the founding director of The Kohala Center's Kaha'u Bay Education Center, and Marine Stewardship and Education Specialist Kathleen Clark. Together with many volunteers, they have collected high-quality data since 2009. The data is the basis of the three reports and this summary. Also extending appreciation to the former UH researcher James M. Bishop for his assistance in understanding the hydrology of Hawai'i Island and the review of the manuscripts.

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#### List of Abbreviations

ENT	Enterococci (a genus of bacteria)
IR	Infra-red
MPN	Most Probable Number (method for estimating bacteria concentration)
N	The element Nitrogen
N+N	Nitrate plus Nitrite
NELHA	Natural Energy Laboratory Hawaii Authority
N02	Nitrite
N03	Nitrate
P	The element Phosphorus
STE	Subterranean Estuary
UV	Ultra-violet
µg/l	Microgram per Liter

#### References

##### Part I. Tidal and Ground Water Influences

Prouty, Nancy G., Peter W. Swarzenski, Joseph K. Fackrell, Karen Johannesson, and C. Diane Palmore. "Groundwater-derived nutrient and trace element transport to a nearshore Kona coral ecosystem: Experimental mixing model results." *Journal of Hydrology: Regional Studies* 11 (2017): 166-177.

Peterson, R. N., Burnett, W. C., Glenn, C. R., & Johnson, A. G. (2009). Quantification of point-source groundwater discharges to the ocean from the shoreline of the Big Island, Hawaii. *Limnology and Oceanography*, 54(3), 890-904.

##### Part II. Tidal Influence on Indicator Bacteria

Bennett, Richard H. "Geographic Distribution of Sucralose in the Kona Coastal Waters." Waterkeepers Technical Bulletin #808210414

Boehm, Alexandria B., and Stephen B. Weisberg. "Tidal forcing of enterococci at marine recreational beaches at fortnightly and semidiurnal frequencies." *Environmental science & technology* 39, no. 15 (2005): 5575-5583.

Boehm Jr, Alexandria B., Nicholas J. Ashbolt, John M. Colford Jr, Lee E. Dunbar, Lora E. Fleming, Mark A. Gold, Joel A. Hanzel et al. "A sea change ahead for recreational water quality criteria." *Journal of Water and Health* 7, no. 1 (2009): 9-20.

Fleisher, Jay M., Lora E. Fleming, Helena M. Solo-Gabriele, Jonathan K. Kish, Christopher D. Sinigalliano, Lisa Plano, Samir M. Elmira et al. "The BEACHES Study: health effects and exposures from non-point source microbial contaminants in subtropical recreational marine waters." *International Journal of epidemiology* 39, no. 5 (2010): 1291-1298.

Lee, Eunhee, Doyun Shin, Sung Pil Hyun, Kyung-Seok Ko, Hee Sun Moon, Dong-Chan Koh, Kyoochul Ha, and Byung-Yong Kim. "Periodic change in coastal microbial community structure associated with submarine groundwater discharge and tidal fluctuation." *Limnology and Oceanography* 62, no. 2 (2017): 437-451.

Yamahara, Kevan M., Sarah P. Walters, and Alexandria B. Boehm. "Growth of enterococci in unaltered, unseeded beach sands subjected to tidal wetting." *Applied and environmental microbiology* 75, no. 6 (2009): 1517-1524

##### Part III. Nutrient Concentrations in Coastal Kaha'ulu Bay

Bishop, James M., Craig R. Glenn, Daniel W. Amato, and Henrietta Dulai. "Effect of land use and groundwater flow path on submarine groundwater discharge nutrient flux." *Journal of Hydrology: Regional Studies* 11 (2017): 194-218.

Bishop, Renée E., William F. Humphreys, Neven Cukrov, Vesna Žic, Geoff A. Boxshall, Marijana Cukrov, Thomas M. Illiffe et al. "Anchialine' redefined as a subterranean estuary in a crevicular or cavernous geological setting." *Journal of Crustacean Biology* 35, no. 4 (2015): 511-514.

Bristow, Laura A., Wriebke Mohr, Soeren Ahmerkamp, and Marcel MM Kuypers. "Nutrients that limit growth in the ocean." *Current Biology* 27, no. 11 (2017): R474-R478.

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February 20, 2022

De Goeij, Jasper M., Dick Van Oevelen, Mark JA Vermelj, Ronald Osinga, Jack J. Middelburg, Anton FPM de Goeij, and Wim Admiraal. "Surviving in a marine desert: the sponge loop retains resources within coral reefs." *Science* 342, no. 6154 (2013): 108-110.

Johnson, Adam G., Craig R. Glenn, William C. Burnett, Richard N. Peterson, and Paul G. Lucey. "Aerial infrared imaging reveals large nutrient-rich groundwater inputs to the ocean." *Geophysical Research Letters* 35, no. 15 (2008).

Johannessen, Karen H., C. Dianne Palmore, Joseph Fackrell, Nancy G. Prouty, Peter W. Swarzenski, Darren A. Chevis, Katherine Telfeyan, Christopher D. White, and David J. Burdige. "Rare earth element behavior during groundwater-seawater mixing along the Kona Coast of Hawaii." *Geochimica et Cosmochimica Acta* 198 (2017): 229-258.

Klausmeier, Christopher A., Elena Litchman, Tanguy Daufresne, and Simon A. Levin. "Optimal nitrogen-to-phosphorus stoichiometry of phytoplankton." *Nature* 429, no. 6988 (2004): 171.

Lau, Leung-Ku Stephen, and John Frands Mink. *Hydrology of the Hawaiian Islands*. University of Hawaii Press, 2006.

Moore, Willard S. "The subtterranean estuary: a reaction zone of ground water and sea water." *Marine Chemistry* 65, no. 1-2 (1999): 111-125.

Peterson, Richard N., William C. Burnett, Craig R. Glenn, and Adam G. Johnson. "Quantification of point-source groundwater discharges to the ocean from the shoreline of the Big Island, Hawaii." *Limnology and Oceanography* 54, no. 3 (2009): 890-904.

Reay, William G. "Septic tank impacts on ground water quality and nearshore sediment nutrient flux." *Groundwater* 42, no. 7 (2004): 1079-1089.

Tanaka, Katsumasa, Michael W. Guidry, and Nicolas Gruber. "Ecosystem responses of the subtropical Kaneohe Bay, Hawaii, to climate change: a nitrogen cycle modeling approach." *Aquatic geochemistry* 19, no. 5 (2013): 569-590.

APPLIED LIFE SCIENCES LLC  
Hawaii and California

July 24, 2024, VIA EMAIL

COMMENTS REGARDING:

Draft Environmental Impact Statement (DEIS)  
for the Kamehameha Schools Keauhou Bay Management Plan  
Keauhou, Hawai'i Island, Hawai'i

Richard H. Bennett MS, PhD  
Applied Life Sciences LLC

The following comments pertain specifically to water quality issues affecting Keauhou Bay. The draft EIS does not address these nor accounts for the fact that the State and the EPA list Keauhou Bay as an Impaired Water Body under section 303 D of the Clean Water Act (CWA). That law requires that impacts to the Bay be mitigated and that further impairment does not occur. This requirement under the law has not been met. Any development in the watershed needs to be conducted by a careful evaluation of this fact. Under the law, remediation begins by conducting a Total Maximum Daily Loading study known as a TMDL. The Bay is listed as impaired for exceeding the limits for turbidity. Turbidity has several causes in near-shore waters, such as runoff water with fine sediments and phytoplankton. Our research shows that turbidity is a problem in Keauhou Bay in the absence of surf events. The turbidity is also due to the overgrowth of marine phytoplankton. Our studies show that turbidity declines along a line moving offshore. The inner Bay has very poor circulation and is where most sediments and other factors causing turbidity arise. Phytoplankton grow in response to increased temperature and nutrient loading in the Bay. The lack of adequate circulation amplifies the problem.



The photo was taken in the summer of 2007 in response to concerns about the greening of Keauhou Bay. The brand name on the canoe paddle is not legible. (photo credit Bennett).

Figure 1. Nine-month summary of turbidity data for the Bay.



(Bennett 2002)

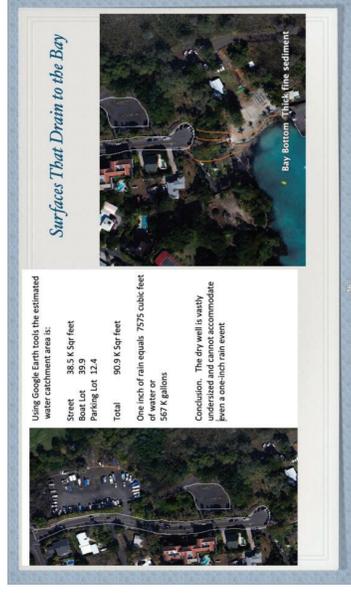
The nine-month summary chart above shows that turbidity is worse at the shoreline and decreases non-linearly in waters offshore. The slight rise in turbidity at 250 meters may be more of a phytoplankton effect than sediment.

The DEIS makes the following statement regarding groundwater.

*Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project in this area, surface runoff generally does not occur in the typical rainfall occurrence. Runoff either percolates into the underlying groundwater or evaporates into the atmosphere. There are no drainage reports or calculations on file with the County of Hawai'i or DOT for the adjacent public roadways or surrounding developed properties. However, existing stormwater runoff peak flow estimates for the three (3) drainage basins within the Project Area are presented in Table 4-4.*

The draft EIS fails to account for surface water runoff from Kamehameha III Road. At the Bayside terminus of the road is a dry well. It is typically loaded with sediment and unable to handle the storm flows that come down the length of the road. Thereafter, water overflows the curb and goes down the driveways and the slope into the Bay. As it does, it picks up considerable sediment and delivers it to the near-shore waters, increasing the turbidity problem (Fig 3).

Figure 2. Rain catchment area and water volume estimate.



(Bennett 2002)

As calculated above, a one-inch rain can produce over five hundred thousand gallons of water, with most of the flow eroding fine sediments as it enters the Bay (Figure 3). The County of Hawai'i was made aware of this dry well failure four years ago. Some of this water comes off of Kamehameha Schools land.

The DEIS statement that rainwater percolates to groundwater suggests groundwater is the terminus and the water does not flow to the sea. For at least 25 years, it was the position of the State that groundwater under the land does not communicate with the sea. Considerable research, such as Kneee (2010), Dulai (2020), Peterson (2009), and others, shows that the State's policy is specious and not science-based. The State's anchialine system is a subterranean estuary (Bishop 2015). Consequently, the DEIS must reconsider the implication that the local groundwater is an inconsequential endpoint for fresh and waste water flows. A recent US Supreme Court decision held that wastewater disposal to the nearshore groundwater without the necessary permit was a violation of the CWA (see footnote page 7).

Figure 3. Stormwater and sediment flow into the Bay.



The photos suggest considerable sediment erosion into the Bay.

Nutrient Degradation and Impairment of the Bay.

The draft EIS does not account for the elevated levels of nutrients in the Bay. Again, our research shows that nitrogen and phosphorus exceed state standards. Unlike other locations, it is unfortunate that the Hawai'i Department of Health fails to measure these nutrients in the Bay. Thus, conducting a nutrient analysis of the Bay waters was necessary. That analysis is provided below.

Table 1. Nutrient analysis along transects over three quarters of 2019

Location	Date	SI	SI	NH <sub>4</sub> <sup>+</sup> NO <sub>3</sub> <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	NO <sub>3</sub> <sup>-</sup>	Salinity	NH <sub>4</sub> <sup>+</sup> (SI) (SI) (SI)		NO <sub>3</sub> <sup>-</sup> (SI) (SI) (SI)		NH <sub>4</sub> <sup>+</sup> (SI) (SI) (SI)		NO <sub>3</sub> <sup>-</sup> (SI) (SI) (SI)	
								ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Keaunohi Ohia	1/22/19	5148	60.1	423.6	18.2	29.6	29.7	174.0	47.6	652.2					
Keaunohi Ohia	1/22/19	5115	43.2	429.4	16.1	29.6	29.1	159.0	44.4	427.5					
Keaunohi Ohia	1/22/19	5185	41.2	205.3	15.4	30.3	17.5	123.8	37.0	329.9					
Keaunohi Ohia	1/22/19	1197	23.2	46.3	11.3	33.5	4.2	31.3	19.3	88.4					
Keaunohi Ohia	4/15/19	3224	26.9	283.1	1.1	30.8	16.9	117.5	38.2	313.3					
Keaunohi Ohia	4/15/19	2106	18.3	216.6	8.5	32.1	12.7	76.0	28.1	209.0					
Keaunohi Ohia	4/15/19	2158	16.2	228.8	2.6	32.2	13.0	79.7	28.7	213.3					
Keaunohi Ohia	4/15/19	853	11.7	36.7	36.4	33.6	6.9	18.5	16.7	55.1					
Keaunohi Ohia	7/20/19	5031	15.8	237.0	36.4	32.4	11.7	86.1	26.184	180.0					
Keaunohi Ohia	7/20/19	1453	13.7	209.6	12.7	32.6	11.1	80.0	24.808	152.4					
Keaunohi Ohia	7/20/19	1402	14.0	210.7	7.3	32.7	10.8	66.8	24.297	155.1					
Keaunohi Ohia	7/20/19	226	3.7	24.8	5.3	38.3	5.8	8.7	14.231	47.8					

Note: The NELHA Lab has multiple certifications, including the State Department of Health

None of the nutrient values for water collected as shown above met state standards. The elevated nutrients in the Keaunohi Bay watershed come from various sources. A common misconception is that fertilizers applied to private properties and the local golf course are the significant sources. However, research shows that nutrient leaching from the Mauna Kea and Keaunohi golf courses is minor compared to the nearby homes on Puako Drive (Dialer 2011). The likely source is the myriad cesspools in the watershed. Some homes on the North peninsula of the Bay are connected to sewers, but most homes are not.

The elevated levels of ammonia suggest a water connection to fresh sources of animal and human waste. Ammonia in marine water is quickly converted to nitrate. Our data also shows the nitrogen and phosphorus levels exceed state standards for the Bay. Had the State collected this data, the EPA would declare water impairment from these nutrients. These elevated nutrients can cause the seasonal "greening" of the marine waters (Smith 2020).

The draft EIS makes no mention of nutrient pollution issues and implies that all new developments will be connected to the sewer line that transmits raw sewage to the Heeia wastewater treatment plant. The treated wastewater containing most of the nutrients in human waste is conveyed to the golf course to irrigate the golf course. It is not known the extent to which those nutrients leech into the groundwater and the Bay. It is also not known how much more water the golf course will utilize in the future.

Several residences and perhaps some commercial facilities in the proposed development area use cesspools or septic systems for human waste management. The impact on the Bay is significant and needs to be described and mitigated. However, this problem is not mentioned in

the DEIS. It is more than advisable that the Project connect all waste systems to the regional sewer.

It is well established that sewer lines leak, which is a function of many factors such as piping class and age (Rutch 2006). In the project area, some sewer lines are quite old. One such line on the East shore of the Bay broke during a significant tidal event. The DEIS does not account for sewer line leakage or the risk from extreme tidal events. This problem needs to be evaluated, and where sewer lines are at risk and need to be replaced by resilient lines such as High-Density Polyethylene (HDPE).

Figure 4. Nitrogen (delta N 15) signatures along the Keauhou Region shoreline

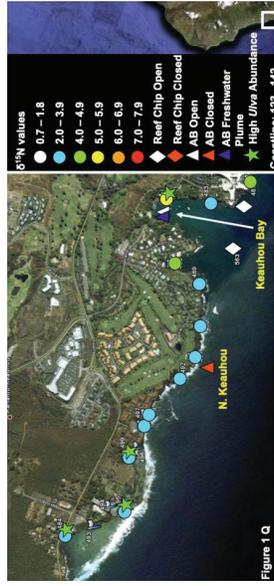


Figure 1 Q (Dallier 2011)

#### Nitrogen Signatures in the Keauhou Area

The magnitude of the delta N 15 value indicates the greater contribution of human (animal) waste nitrogen. Raw sewage water is currently conveyed from the hotel at the Bay to the Heeia Wastewater Treatment Plant (HWWTP). The Secondary treated wastewater (WW) is provided to the local golf course for irrigation. How much water the golf course needs or could utilize is unknown. Casual observation of the course suggests that it is under-irrigated. Nutrients in the WW are not removed but beneficial to the grass. Delta N 15 data indicates that the golf course contributes negligible human (animal) nitrogen to the near-shore waters.

In contrast, the Delta N 15 values are higher in the Bay proper. The source is likely human waste from cesspools in the immediate region. Less than half of the homes are connected to sewer. It is imperative that the DEIS account for these sources and provide sewer design criteria for all new developments to be connected to the HWWTP.

Figure 5. Non-permitted wastewater discharge to the Bay



Some years ago, federal funds were provided to upgrade the Bay boat launch facilities. Before the upgrade, boat wash water flowed over the surface and into the Bay. A dry well was installed, and it drained to surface water only a few feet below the drain. Boat wash water is potable water. The wash water contains fish liquids, blood, and particulate fish waste. This wastewater may be a source of ammonia in the Bay. Washed bilge water often contains oil products. The data in Figure 5 is from the wash water surface drain at Honokohau Harbor.

Since it is obvious this wash water flows into the Bay in the groundwater, the State should have applied for an NPDES permit. Such a permit is required for any ocean discharge of wastewater, especially in waters known to be Impaired under the CWA. This requirement has been affirmed by the Supreme Court<sup>1</sup>.

#### Conclusions

The surface water and groundwater flows from the proposed development and those in the upper watershed need to be considered to ensure that further degradation of this impaired water body does not occur. This is referred to herein as a TMDL. Given the environmental ethics of Kamehameha Schools and the legal history of the Public Trust Doctrine of the State Constitution<sup>2</sup>, we suggest that these environmental impacts described above be studied for the project design and mitigated.

<sup>1</sup> County of Maui, *Hawaii v. Hawaii Wildlife Fund*, 140 S. Ct. 1462, 590 U.S. 165, 206 L. Ed. 2d 640 (2020).

<sup>2</sup> *Kelly v. 1250 Oceanside Partners*, 140 P.3d 985, 111 Haw. 205 (2006).

Keauhou Bay is a small bay inlet on Hawai'i Island and, as such, is subject to much more degradation than the open shore area of West Hawai'i. As such, the Bay requires special protections.

Sincerely,

/s/ R.H. Bennett MS, PhD, President

#### References

- Bennett, R. H. The Impaired Waters of Keauhou Bay, Hawai'i Island 2022. [https://www.youtube.com/watch?v=pk\\_-Q25bX0s](https://www.youtube.com/watch?v=pk_-Q25bX0s)
- Bishop, Renée E., William F. Humphreys, Neven Cukrov, Vesna Žic, Geoff A. Boxshall, Marijana Cukrov, Thomas M. Iliffe et al. "Anchialine" redefined as a subterranean estuary in a crevicular or cavernous geological setting." *Journal of Crustacean Biology* 35, no. 4 (2015): 511-514.
- Dailer, M, Smith, C., Glenn, C. Preventing the introduction and spread of nutrient driven invasive algal blooms and coral reef degradation in West Hawai'i, University of Hawai'i, Manoa, Grant Number NA09NOS4260242, 9/30/2011
- Dulai, Henrietta, Catherine Hudson, Trista McKenzie, Brytne Okuhata, Diamond K. Tachera, and Aly El-Kadi, 2021. Geochemical Signatures of Coastal Groundwater Reflect Groundwater Flow Lines and Land-Uses in West Hawai'i. Submarine Groundwater Discharge session, GDEs; [International Tropical Islands Water Conference](#); University of Hawaii at Manoa, Honolulu, HI (via videoconference).
- Knee, Karen L., Joseph H. Street, Eric E. Grossman, Alexandria B. Boehm, and Adina Paytan. "Nutrient inputs to the coastal ocean from submarine groundwater discharge in a groundwater-dominated system: Relation to land use (Kona coast, Hawaii, USA)." *Limnology and Oceanography* 55, no. 3 (2010): 1105-1122.
- Peterson, Richard N., William C. Burnett, Craig R. Glenn, and Adam G. Johnson. "Quantification of point-source groundwater discharges to the ocean from the shoreline of the Big Island, Hawaii." *Limnology and Oceanography* 54, no. 3 (2009): 890-904.

Rutsch, M., J. Rieckermann, and P. Krebs. "Quantification of sewer leakage: a review." *Water Science and Technology* 54, no. 6-7 (2006): 135-144.

Smith, Joseph S., Ryan J. Winston, R. Andrew Tirpak, David M. Wituszynski, Kathryn M. Boening, and Jay F. Martin. "The seasonality of nutrients and sediment in residential stormwater runoff: Implications for nutrient-sensitive waters." *Journal of environmental management* 276 (2020): 111248.

**From:** keauhoubay <[REDACTED]>  
**Sent:** Tuesday, July 30, 2024 4:05 PM  
**To:** Rebecca Melendez; Roy, Alex; 221053-01 KS Keaouhou Entitlements; keauhoubay  
**Subject:** RE: [EXTERNAL] PLEASE DON'T ALLOW BUNGALOW RESORT IN KEAHOUBAY

Yellow Category

Aloha,  
Thank you for your comments concerning the Keaouhou Bay Management Plan, Draft Environmental Impact Statement. Your comments have been received and administratively recorded.

Comments received during the 45-day public comment period will be reproduced in the Final Environmental Impact Statement, and substantive comments addressed.

Your feedback will be forwarded to the County of Hawai'i, State of Hawai'i, and our planning consultant, G70. If you have already copied these parties on your email, please note that we will **not** be forwarding a duplicate copy.

We appreciate your involvement and contribution to the environmental review process. Your input is invaluable in helping us develop a management plan that reflects the needs and concerns of our community.

Thank you once again for your engagement and commitment to the future of Keaouhou Bay.

Mahalo,

The Keaouhou Bay Project Team

**From:** Rebecca Melendez <rebeccasaddress@gmail.com>  
**Sent:** Monday, July 1, 2024 12:05 PM  
**To:** Roy, Alex <Alex.Roy@hawaiicounty.gov>; 221053-01 KS Keaouhou Entitlements <KeaouhouBay@g70.design>; keauhoubay <keauhoubay@ksbe.edu>  
**Subject:** [EXTERNAL] PLEASE DON'T ALLOW BUNGALOW RESORT IN KEAHOUBAY

**CAUTION: This email is from an outside sender. Do not click on links or open attachments unless you recognize the sender and know the content is safe.**

Dear County of Hawai'i Planning,

This is my revised letter with scientific proof that developments have caused serious damage to the Hawaiian Islands coastline, and if you allow a Bungalow Resort to be built in Keaouhou Bay by Kamehameha Schools, you will be causing Keaouhou Bay to be several polluted for years to come. It will never be the same again!

Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project, because it is scientifically proven that developments will ALWAYS have rain runoff that will pollute nearby waters constantly during development and after.

Please, read the Scientific articles below written by NOAA, National Oceanic and Atmospheric Administration and other professional organizations, that prove that developments have ALWAYS polluted the water in every coastal development area.

The coral all over Hawai'i has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keaouhou Bay will be devastating to the coral, reef fish, and all Aquatic Life there, and even the Manta Rays that go there to eat zooplankton from the Manta Ray tours at night, and they eat it during the day in that area as well because they need to eat 5 times their body weight in zooplankton daily. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

If you allow this bay to be development you will be allowing all types of marine life to die and there is NO WAY to stop this from happening because polluted runoff rain water from developments can't be fully stopped. It is what has happened in ALL coastal developments.

Please read the Scientific proof below.

Reason #1 It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawai'i. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide..."

This was the third major bleaching episode in Hawai'i over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off) " <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,had%20catastrophic%20impacts%20state%2Dwide.>

This article is by the Coral Reef Alliance here in Hawaii: "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/wherewe-work/hawaiian-islands/#~:text=Hawaii%20reefs%20face%20major%20global,into%20Hawaii%20waterways%20every%20day>.

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban runoff, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The Chesapeake Bay has a foundation that is trying to save it due to runoff pollution that was caused by developments, and the Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed because this bay is very small.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or

local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20a%20placed%20in%20jeopardy>.

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay because it is so much smaller than the Chesapeake Bay.

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%20based%20sources,and%20mortality%20in%20sensitive%20species>.

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide>.

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals).

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water..." (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

Reason #2 It's Been Proven Resort Developments KILL Marine Life

The manta rays go to Keauhou Bay every night to eat zooplankton and if you allow this development that WILL have runoff water, you WILL be causing zooplankton to be seriously affected because as this article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in [predation](#). As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that proves runoff from development in this area will hurt and kill plankton, by **Frontiers in Marine Science**, "**Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon**" The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-*a* concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

"Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

Here is a research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton" There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter

aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation." [https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3\\_6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3_6_chapter12_257-274.pdf)

The above articles show that development of Keauhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this could cause the manta ray food source to disappear and that will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on the manta ray tour for their income.

Reason #3 It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will forsure bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regards to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in *Nature Sustainability*." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20study%20said.>

Why allow this resort to be developed, you will be destroying the coral reefs in the bay because this bay is extremely small and used by a lot of locals already for fishing, canoeing, swimming, snorkeling, paddle boarding, surfing, boating...it can't afford more use by many thousands more people yearly.

If you allow Keauhou Bay to be developed there will be a higher population in the bay and that will hurt the coral in the bay as well, because it's known that, "Denser coastal

populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with metapopulation theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhajHjAnWAq453tRgN0jAiwel9inR3ZotV0PyGzA5lc\\_H0Q1zCHNIP3ASnhcgKRY6\\_vkLPw49qbmBYoXSg3YIMgQIGBZsapdGUH701SILbu9x5P73xED4KxL4TosJlvgQ1a7ZR3rUbraxpodJd2AoNISmWsuX87JJEddpJ8OCJpX7ITJWdCFXvFKJIZYeNdCjJ3Sw\\_dnaUg5lZihcJPBDImmaHl5vgT5O%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhajHjAnWAq453tRgN0jAiwel9inR3ZotV0PyGzA5lc_H0Q1zCHNIP3ASnhcgKRY6_vkLPw49qbmBYoXSg3YIMgQIGBZsapdGUH701SILbu9x5P73xED4KxL4TosJlvgQ1a7ZR3rUbraxpodJd2AoNISmWsuX87JJEddpJ8OCJpX7ITJWdCFXvFKJIZYeNdCjJ3Sw_dnaUg5lZihcJPBDImmaHl5vgT5O%3D&tracking_referrer=abcnews.go.com)

Reason #4 a Resort Development WILL Increase Traffic on Already Severely Trafficed Roads The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side.

Allowing another resort to be developed will bring more cars that will lead to a lot more traffic that the island can not handle, please read the articles below by different NEWS companies that prove this point.

This NEWS article by Hawaii News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Please watch their video on their link below because it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists comes more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state; This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks...

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is the same for Big Island. The traffic problems they talk about are the same issues here on Big Island, and this article also gives one Big Island example. "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

Please, watch the NEWS video from the link below on aerial footage in Hilo because the footage shown is the same thing that is happening on Aalii Drive and Queen K HWY, and for the same reasons.

There are 2 developments already on Aalii Dr. being built as of today, and more are scheduled for this road in the near future, and Aalii Dr. and Queen K HWY are the roads Kamehameha Schools Bungalow Resort will be using if approved and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow already.

The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well.

See the photo below that proves this point in Kona, and here is the NEWS article by KITV NEWS that talks about Hilo and the same thing is happening in Kona on the roads Kamehameha Schools wants to develop their resort, "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash on Aalii Dr. and when there is an accident on this road, it turns into only one lane that needs a flagger to help direction traffic, and that adds even more traffic to this already seriously congestion road, and Kamehameha Schools wants to add a resort on this road, and that will increase the traffic even more.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FQ5snPDjI8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Please read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii'i Island.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path as well as The Law of the Splintered Paddle below <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

### The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law, "[K?n?wāi M?malahōe](#)," or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless (especially k?puna and keiki) across Hawai'i be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawaii. After being added back in 1978, the law is part of Hawaii's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

**The Law of the Splintered Paddle** is also on Kamehameha Schools website, so they should want to help make Big Island roads become safer and not add to the traffic and possible traffic death toll problem. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-rings-true-200-years-after-k>

Besides a resort development in Keauhou Bay causing runoffs that will severely pollute the bay as the above research and science articles have shown above causing marine life to die, it will also increase in the bay's population that will seriously add to damaging even more coral, plankton and all marine life as well, and the island has severe traffic issues already with increased death tolls rising, and a resort development in Keauhou Bay will totally increase even more traffic in these already severely congested traffic areas.

Reason #5 The Big Island Doesn't Have the Resources and Infrastructure for Another Resort

Please see the articles below because the Big Island doesn't have the resources or infrastructure to safely add another resort development on island and these other NEWS and Research articles prove this point.

1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a

facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4)"What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke HAWAII ISLAND PUBLISHED 11:30 AM ET Dec. 11The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables->

5) "The overwhelming plastic waste Hawaii visitors leave behind By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A county commission drafts ordinance aiming to ban recyclables at West Hawaii landfill By Megan Moseley September 6, 2023 · 1:00 AM HST \* Updated September 6, 2023 · 2:02 PM

Hawaii's County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) " Hawaii's County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawaii's Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-CA%BBi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit: Over A Kona Sewage Plant Kealahehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii's Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "BIG ISLAND NEWS HECO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii's State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST \* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) "LOCAL NEWS

HECO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night.  
<https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawai'i's water supply Hawai'i Public Radio | By Savannah Harriman-Pote  
Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawai'i Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawai'i's power system from its water system, said Kawika Uyehara, deputy director of Hawai'i County's Department of Water Supply. "<https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) U.S. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues  
By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "we're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) NewsHawai'i County issues mandatory 25% water restriction for North Kona  
August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawai'i Water Supply Closely Monitored As Severe Drought Continues  
by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai%CA%BB%u2014-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

20) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_th\\_at\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_th_at_several_large/?rdt=52660)

21) "NewsHawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will damage Keauhou Bay coral and marine life and, Big Island resources and infrastructure are currently being negatively affected from the development that is on island already, and there are years of new development that have already been approved, before having safe resources and infrastructures for new developments.

With these scientifically proven articles by some of the most professional scientists in the world, they say the a serious population increase, as well as development and resort runoff that happens because of parking lots, and... with all coastal developments, it will be dangerous for Keauhou Bay to be development because it will damage the marine ecosystems in the area.

Please, save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools because all of these articles prove it would be extremely damaging to the waters at Keauhou Bay.

Rebecca Melendez

Thank you,

Sincerely,

Rebecca Melendez

This message is the property of Kamehameha Schools and any attachments are confidential to the intended recipient at the e-mail address to which it has been addressed. If you are not the intended recipient, you may not copy, forward, disclose or use any part of this message or its attachments. If you received this transmission in error please notify the sender immediately by e-mail or contact Kamehameha Schools at webmaster@ksbe.edu and then delete this message from your system.

**From:** Rebecca Melendez <[REDACTED]>  
**Sent:** Monday, August 5, 2024 8:36 AM  
**To:** 221053-01 KS, Keaouhou Entitlements; Roy, Alex; Planning@hawaiicounty.gov; Keaouhoubay@ksbe.edu  
**Subject:** Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT  
**Attachments:** SAVE Keaouhou Bay Petition.jpg; Help Big Island Resources Petition.jpg  
**Categories:** Yellow Category

To whom it may concern,

Please reject Kamehameha Schools EIS because they have NOT followed the cultural laws. By law they MUST do what is BEST for the Hawaiian people's cultural practices and it is proven developments WILL pollute nearby waters and if these waters get polluted, the Hawaiian people will be paddling canoe, swimming, fishing... in polluted water.

Kamehameha School's Bungalow Resort Development will clear land that has been protecting Keaouhou Bay from golf course runoff pollution for years, and the development will kill an entire ecosystem.

- The "Natural Ground Cover has 10% runoff, where as development has 55% runoff..." [This was taken from NOAA'S website](#) and this researched article proves the natural land has been soaking up the above golf course pollutions before it runs into the bay for years.
- "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development..." This info was taken from [Global Coral's website](#) and it SCIENTIFICALLY PROVES that their development will pollute Keaouhou Bay because of the golf course runoff that will happen.
- "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." This info is from [Environmental Evidence Journal website](#) and SCIENTIFICALLY PROVES that developments KILL CORAL AND MARINE LIFE.

Please watch this video <https://www.youtube.com/watch?v=DoKlUa9Pyk5c>

Please watch this video <https://www.youtube.com/watch?v=IT9sle0egA0>

In their EIS they have NOT contacted as many Hawaiian people as they NEED to contact to prove that the Hawaiian people want this bungalow resort because in the ONLY public meeting they held in 2022 (I was on this zoom call) there were many people on this zoom call and EVERY SINGLE PERSON ON THIS ZOOM CALL OPPOSED THEIR BUNGALOW RESORT DEVELOPMENT and their were plenty Hawaiians on the call.

Kamehameha Schools have NOT spoken with the Kong family who are descendants from Keaouhou Bay and this video is of Kupuna Kumu Lily Kong who was born in Keaouhou Bay and she states that she is against development. She also states that her mother was against development as well. Please listen to her words in her testimonial video about Keaouhou Bay on this link and know that this proves that

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descendant directly from Keaouhou Bay OPPOSE THIS DEVELOPMENT <https://vimeo.com/994680462> and it is CULTURAL LAW THEY MUST BE HEARD AND ACKNOWLEDGED!

These laws were created, "After these legal victories, the Kohanaiki 'Ohana worked to create a new law in the state of Hawaii to require Cultural Impact Statements along with Environmental Impact Statements for all future large-scale development. Act 50, the Cultural Impact Statement Law was adopted in 2000." <https://kohanaikiokhiana.org/legal-victories>

Kupuna Kumu Lily Kong also states that there are burial grounds on the land that Kamehameha Schools wants to clear and it is told that Kamehameha Schools has bulldozed sacred land in the past and Keaouhou Bay's burial grounds MUST BE RESPECTED AND NOT DISTURBED!

I was also told by Hawaiians that there were bones in the small cave that is at the base of Keaouhou Bay. These burials need to take priority over a Bungalow Resort Development.

Kamehameha Schools has completely IGNORED this petition that OPPOSES their development resort in Keaouhou bay because when I presented this petition to them, Marissa Harman told me, "Those signatures are just tourists" and there are many signatures that ARE tourists. The exact tourists that they want to rent too in their Bungalow Resort Development, and these people are signing a petition OPPOSING this resort development.

Also, there are thousands of signatures on this petition that are the Hawaiian people and locals, and I have sent Kamehameha Schools these signatures and the comments from this petition so they can read what Hawaiians, locals and tourists are saying about why they are OPPOSING their resort development and Kamehameha Schools has NOT read or considered that these comments have value in anyway.

There are over 6,198 signatures as of Aug. 5<sup>th</sup> and these signatures and comments HAVE A RIGHT TO BE ACKNOWLEDGED AND THEY HAVE VALUE TO BE HEARD, THESE PEOPLE MATTER AND IT IS CULTURAL LAW THEY MUST BE ACKNOWLEDGED!

Here is the petition link: [https://www.change.org/p/save-keaouhou-bay-from-becoming-a-big-crowded-resort?utm\\_source=share\\_petition&utm\\_medium=custom\\_url&recruited\\_by\\_id=92a53560-1e91-11e5-b4ef-b94e90cedb4d](https://www.change.org/p/save-keaouhou-bay-from-becoming-a-big-crowded-resort?utm_source=share_petition&utm_medium=custom_url&recruited_by_id=92a53560-1e91-11e5-b4ef-b94e90cedb4d)

Please read and acknowledge this petition and the 6,198 signatures (grows daily with more signatures and comments) on this petition and acknowledge the comments from the Hawaiian people, locals and tourists on this petition because I have coped ALL of comments as of today and added them below.

Petition: **Save Keaouhou Bay From Becoming a Big Crowded Resort**

Keaouhou Bay is historical sacred land. It's also a small commercial and quiet residential area, with a local canoe club that uses the bay daily, local volleyball groups that play there daily, families BBQ every weekend, hold funeral services, baptisms local kids enjoy swimming, and visitors enjoy paddle boarding and kayaking all the time without a crowd.

Read their information on this link [https://www.ksbe.edu/keaouhou\\_bay/](https://www.ksbe.edu/keaouhou_bay/)

It's possibly the last untouched historical area that has not been seriously developed and it has been a comfortable and quiet bay for locals and visitors alike for many years without a big resort crowd.

2

The beach is just over the size of one volleyball court that is there, with an even smaller park on the other side. It doesn't have a crowded feel and it's not big enough to become a resort area.

It is also the historical site of the birthplace of the Hawaiian people's King Kamehameha III. The area holds much history and is a very sacred area to everyone, especially the Hawaiian people.

Developers are considering building this area up and putting 150 Resort-style bungalows in this very historical, quiet, charming, and small commercial and residential area that many people have enjoyed as it is for many decades.

Not only is the area not big enough for a new resort, but there is also already a nice hotel at the point of this bay and Time Share homes right next to that.

Both of those work very well with this area and offer tourists a lot of fun places to stay without taking away from the land, its history, quietness, all the local activities, and the small commercial buildings that have been there for many years.

Updating the commercial builds that are already there would be great, and adding a nice cultural center there would be nice for everyone as well, not just tourists having bungalows.

To have a cultural center where people can learn more about the land, and the Hawaiian people can have a place of their own at King Kamehameha III's birthplace would be great.

Creating a walkway so the disabled can get from the Northside to the Southside would be another great add, but NOT building 150 new bungalows for a lot of people who don't even live here, who will then crowd the bay because the bay will be the focus for them staying there.

Now, besides putting another resort in this area, they want to open up the old road that has been beautifully overgrown with native plants and is located just above the canoe club and goes right through King Kamehameha III's birth site.

This will bring a lot of traffic right through this beautiful historical place where many locals hold family funerals, baptisms, birthday parties... It will overcrowd this very small special area that locals and visitors have been using for many decades, in many different loving ways.

Putting a road in could also increase the temperature there because of the pavement, and the traffic that will then pass through this beautiful, historical, sacred, and quiet area will be huge.

Trees shade this area right now very well and also help keep the erosion down by helping stop a lot of mud and debris from going into the ocean after big tropical storms that the island has sometimes. Without trees the bay could be extra muddy.

Plus, they want to add more commercial shops to Keaouhou Bay, and Keaouhou Shopping Center has a lot of empty For Lease stores available. To create more shops when there are shops empty and For Lease in Keaouhou Shopping Center just above the bay, is not being sustainable and using what we already have.

Please HELP SAVE Keaouhou Bay from becoming a big Resort area. It is one of the last historically untouched areas on the island that has not been overdeveloped and has been fully enjoyed completely by locals and visitors for many decades.

**Comments for the above petition:**

### Reasons for signing

See why other supporters are signing, why this petition is important to them, and share your reason for signing (this will mean a lot to the starter of the petition).

- 

[Lisa Lopez](#) 1 day ago

Please stop building and adding more to areas that need open space...it's too crowded already.

[Elizabeth A Goehner](#) 2 days ago

Want to save Kealakekua Bay from being destroyed by more new developments

- 

[Gina Harvey](#) 2 days ago

It is important to protect small communities and special ecosystems from over development which puts too much strain on these areas.

- 

[Kathryn Matlock](#) 2 days ago

I live in Keaouhou and want to have this beautiful part of Hawaii NOT ruined. Kamehameha Schools lets all of the hillside behind go... It is full of coquis as brush just waiting for a fire! Take care of the land you are already supposed to be RESPONSIBLE for!

- 

[Keri Johns](#) 3 days ago

The people who live here and pay taxes should come first...Hawaiians should have homes first!!

- 

[Judy MacDonald](#) 3 days ago

Keaouhou Bay is a historical site that should be preserved for residents and visitors use.

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[Glonda Jennings](#) 5 days ago

I have been a visitor to this location and it is perfect just the way it is!

**Janet Berketa** 1 week ago

this project is very environmentally destructive, and bad for our climate.

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Report

**Fran copp** 1 week ago

The Keauhou Bay should be protected as is bc the island needs to be protected for the recreation of the residents. It would be ruined if that many units for short term rentals were put in such a small place. It would pollute the environment and change the habitat for the animals that live there for the benefit of the golf course. In 10-20 years the place would be trashed. It's a small location not able to handle the traffic, and trash. Government is here to serve the community not promote a business that cause irreparable harm to the people and animals who leave. We don't want it.

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Report

**Karen Kenyon** 2 weeks ago

I believe that preserving the bay is absolutely vital—this project does not do this. It will also add to traffic and increase noise for those with condos in the area.

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Report

**Elizabeth Martin** 2 weeks ago

There is too much development in Kona with no regard for the sacred spaces which are demolished for the GREED of developers. STOP ruining this beautiful sacred island!

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**Ladislav Szabo** 5 days ago

To keep Hawai'i beautiful, and to protect our sea life.

**Cyndi Wong** 6 days ago

Welina mai kākou. This sacred place is the birthplace of Kauikoaouli, King Kamehameha III longest reigning monarch of Hawaii and should be preserved for generations to come. Please preserve Keauhou! E mālama i keia ʻāina kapu, Mahalo

**Terri Yoshinaga** 7 days ago

Problem: Kamehameha Schools wants Keauhou Bay to become a Bungalow Resort. This is a VERY small bay. The Resort will have 105 rooms that means 200+ more people in this small area. This will have serious negative impacts on the bay like more pollution, traffic congestion, negatively affect the endanger species there and more!

**Ron Dias** 1 week ago

Ron Dias

**Kathleen Delorme** 1 week ago

Turning this into a resort will lead to over-crowding, congestion, pollution and environmental and social problems unneeded by the area to flourish and sustain life respectfully!

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Report

- **Michelle Melendez** 2 weeks ago  
[I want to save the bay!](#)
- 0
- **Report**
- **Jennifer Lund** 2 weeks ago  
 Enough is enough. Short term financial gain is not worth it. Environmental Impact: Pollution Risk: Developments pollute nearby waters both during and after construction. Endangered Species: Habitat for federally protected green sea turtles and endangered monk seals. Development will threaten these species due to pollution and human disturbance. Golf Course Runoff: Golf course pesticides and fertilizers lead to harmful algae blooms, killing coral and marine life. The removal of the trees that act as a natural filter will allow golf course runoff to pollute the Bay. Increased Human Activity: More tourists and residents will increase noise, water, and light pollution, further disturbing marine life. Motor Vehicle Pollution: Increased traffic from the resort will lead to more oil and heavy metal runoff into the bay. Noise Pollution: Construction and increased human activity will disrupt marine life, particularly cetaceans. Stormwater Runoff: Development will increase impervious surfaces, leading to higher stormwater runoff and pollution. Sea Foam Toxins: Pollutants in runoff can lead to toxic sea foam, affecting air quality and marine health. Scientific Evidence: NOAA & Other Studies: Developments have always polluted coastal waters, harming marine ecosystems. Coral Reefs: Runoff from developments causes coral bleaching and death, as evidenced in Hawai'i and other coastal areas. Plankton Decline: Pollutants from runoff kill plankton, crucial for manta rays' diet, leading to ecosystem collapse. Algae Blooms: Pollution runoff causes algae blooms, smothering coral reefs and killing marine life. Ecosystem Research: Studies show significant negative impacts on marine ecosystems from development-related runoff. Legal Concerns: Endangered Species Act: Development violates the act's mandate to conserve habitats for endangered species. Hawaii Conservation Laws: Local statutes require conservation of indigenous aquatic life and their ecosystems. Conservation Mandate: Federal and state laws emphasize conserving ecosystems that support endangered species. Infrastructure Issues: Resource Strain: Big Island already faces water shortages, limited landfill capacity, and power conservation needs. Inadequate Infrastructure: Existing infrastructure cannot support additional strain from a large resort development. Waste Management: Big Island's landfill is nearing capacity, and new developments will exacerbate waste issues. Water Crisis: Ongoing drought and water contamination issues make additional strain from new developments unsustainable. Power Conservation: Big Island is currently experiencing power shortages and rolling blackouts, and new developments will increase demand. Case Studies: Chesapeake Bay. Coastal developments cause significant harm due to runoff, a situation Keauhou Bay could face. Hawaiian Islands: Existing research shows developments lead to severe degradation of coral reefs and marine life. Global Examples: Similar coastal developments worldwide have resulted in long-term environmental damage. Community Impact: Local Use: Keauhou Bay is a popular spot for local activities

- **Report**
- **patrice rammer** 2 weeks ago  
[Patrice Rammer](#)
- 0
- **Report**
- **Jennifer Cramer** 2 weeks ago  
[Jennifer Cramer](#)
- 0
- **Report**
- **annie jay** 2 weeks ago  
[We need to stop overbuilding and destroying such delicate ecosystems.](#)
- 0
- **Report**
- **GATV Pfahl** 2 weeks ago  
[I want keaouhou to remain undeveloped! Leave the area alone to enjoyed by locals and visitors as it is!!](#)
- 1
- **Report**

such as boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. Tourist Impact: Increased tourist activity will further degrade natural resources and disturb local wildlife. Economic Considerations: Tourism Dependence: Manta ray tours and other eco-tourism activities depend on a healthy marine environment. Local Economy: Damage to the bay's ecosystem will negatively affect local businesses reliant on marine tourism. Long-Term Costs: Environmental degradation will lead to long-term economic costs, outweighing short-term development gains. Conclusion: Long-Term Impact: Allowing the bungalow resort will permanently alter and likely destroy Keauhou Bay's ecosystem. Conservation Priority: Emphasis on conserving the bay as a natural habitat for endangered species and marine life. Community Responsibility: Urge decision-makers to consider the long-term environmental, economic, and community impacts before approving the development

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Report

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**Ann Eshabarr**2 weeks ago

This is sacred land. There's enough going on already on the bay so leave it alone. I am very concerned about traffic and more water pollution. This is a terrible idea.

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Report

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**Yemaya Indira Duby**2 weeks ago

[Save this fragile eco-system!](#)

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Report

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**Ru Cartley**2 weeks ago

Very concerned & opposed to more tourist accommodations as we face less and less housing. Greedy developers, enough is enough!

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Report

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**Lori Sceales**2 weeks ago

We do not need, nor want, this kind of development!

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Report

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**Anne Yelken**2 weeks ago

Sacred land should be protected and kept pristine. Keep the Bay intact with its beauty and historical value. Leave it as it is!

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Report

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**marsha stafford**2 weeks ago

We do not have the roads nor infrastructure for more development

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Report

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**Stéphane Kunicki**3 weeks ago

[Over développement on the island has already lead to destruction of coral reefs and natural.... Read more](#)

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Report

- [Sherri Bugenhagen](#)4 weeks ago

I believe that this area should be saved from development and let it continue as is...a very scared area! leave it as is!!

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Report

- [Veronica Duguran](#)4 weeks ago

We need to keep our beaches and town how it is. How we grew up, where our kids can grow up. We get moving forward but at the same time we need Hawaii to stay Hawaii and not make it look like Oahu.

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Report

- [Allison Shapiro](#)4 weeks ago

It's a special and sacred place! Let's protect it.

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Report

- [Mary Bradley](#)4 weeks ago

I love visiting the Big Island because of the vibe. Another big resort development will ruin this place and I'll take my tourist money elsewhere. This island cannot sustain more development. More development makes the rich richer and robs the the people of the island. The environment cannot withstand more development.

Report

- [Barbara Jossy](#)3 weeks ago

Too much development already.

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Report

- [cathy costa](#)3 weeks ago

I am signing it because I grew up there and it is our grama land Victoria kamamalu She never relinquished it

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Report

- [Lili Leong](#)4 weeks ago

He ali'i ka 'āina, he kauwā ke kanaka. Stop selling our wahi pana to people who can not possibly understand.

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Report

- [ann mooney](#)4 weeks ago

no more development, please.

- Report
- 
- Jen Ball**4 weeks ago
- I have come to this area for years, and it would be travesty to build yet another hotel in a time of global warming and climate change. The Outrigger can barely keep it together! No more big hotels!
- 0
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- Report
- 
- Ashlee Johnson**1 month ago
- We need natural wild places, not more homes
- 0
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- Report
- 
- Jennifer Stabrylla**1 month ago
- So many people have enjoyed the bay as it is for decades. We appreciate it as a serene spot with access to swimming and paddling and quiet times. I am certain that that will all be taken away by development, and we cannot abide losing this spot and the desecration of a truly sacred space.
- 0
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- Report
- 
- Janene Lasswell**1 month ago
- This project is not in alliance with the general plan for Hawaii County. County residents need more affordable housing in areas already zoned for residences. County residents need more beach parks for free recreation, for which this bay is zoned, according to the 2045 General Plan. Bishop Estate/KSBE had net assets of 1.1 B (eleven billion) dollars on their 2022 Form 990. Enough is enough.
- 0
- 
- Report
- 
- Jen Ball**4 weeks ago
- I have come to this area for years, and it would be travesty to build yet another hotel in a time of global warming and climate change. The Outrigger can barely keep it together! No more big hotels!
- 0
- 
- Report
- 
- Cory Harden**1 month ago
- enough hotels already!
- 0
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- Report
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- Marjorie Erway**1 month ago
- It's an inappropriate development for the area.
- 2
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- Report
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- Louise Pape**1 month ago
- Far too much of our resources are being destroyed- we MUST save whatever is left. Money has taken us over far too much. Mahalo
- 1
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- Report
- 
- Crista Morones**1 month ago
- Because its an HISTORICAL SACRED BAY!!!

- 2 .  
Report
- **Robert Kirkpatrick** 1 month ago  
Have you seen what the manta tours has done to keauhou? It's so overcrowded you can even park! Where the people gonna go? Enough is enough already!
- 1 .  
Report
- **Vanecia Lourenco** 1 month ago  
I want the Hawaiian culture to stay alive
- 1 .  
Report
- **Hana Wilhovsky** 2 months ago  
Construction of hotels or places for tourists would eliminate the small businesses that are able to provide educational and fun opportunities for those visiting. Lack of tourist education can cause ignorance and destruction of the natural environment that makes Hawaii so beautiful.
- 0 .  
Report
- **Olivia Payne** 2 months ago  
If I was in the same shoes as the locals I would not want disrespectful people harming the island and treating it as a piece of trash
- 0 .  
Report
- **Aubrey Featherston** 2 months ago  
This is a incredibly beautiful spot and I'd hate to see it get bulldozed over and become in accessible
- 0 .  
Report
- **Jenn Dant** 2 months ago  
Coastal development can cause chronic sedimentation, sewage effluent, industrial discharge, changes in waterflow and run off which can affect coral, contributing to climate change, increasing ocean acidification, and threatening coral reef ecosystems.
- 0 .  
Report
- **elliott Glover** 2 months ago  
The bay needs saving
- 1 .  
Report
- **Amaya Dorman Mackenzie** 2 months ago

Truly a beautiful and sacred site. Seeing the amount of unused property which already exists on the island in and of itself wasteful. but then to add yet more vacation homes to a place which has deep meaning is insensitive and shortsighted. As the description of the petition here says.....Read more

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Report

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**Max Hollomon**2 months ago

Natural beauty and animals should be protected we see too many get lost to progit

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Report

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**Alexandra Saffery**2 months ago

Locals can't even afford the hotels. We need money and development on our schools, roads, hospitals, open space, shoreline access. Not more strain and tourism

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Report

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**Rick Davis**2 months ago

Live in Holiuloa and paddleboard almost every day in Keauhou Bay. The waters are pristine, filled with life, and uncrowded. I often see manta, dolphin, sea turtles, shark and many other kinds of fish. .... Read more

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Report

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**caroline MARONGIU**2 months ago

We don't need this resort. The island needs to stay wild and authentic...Destroying such a beautiful place is disgusting and disrespectful for the land and native.

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Report

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**Virginia Garza**2 months ago

[Virginia garza](#)

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Report

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**Devra Dynes**2 months ago

Big Island has very few beaches to enjoy. Don't want pockets of Honolulu scattered all around Island! Tourism has high costs for all; look what's happened to Kailua??

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Report

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**Mary Burke Monroe**2 months ago

There are enough resort type developments on the West side of the Big Island already. Keauhou Bay is much too small and this type of development would destroy the peace and tranquility of the area. There is already a hotel and time share units in the direct vicinity. There is no need for further congestion and destruction of this sacred site.

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Report

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Lucas Felipe 1 year ago

Pelo meio ambiente

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Report

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Leiana Sine 1 year ago

Enough of our land has been exploited for the continents money

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Report

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bini easley 1 year ago

Such a small historical place leave it alone

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Report

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Andrew Roberts 1 year ago

This is a very special spot where you still can canoe paddle and feel like you're still living in Hawaii. Just come down and watch the kids playing in the water and fishing. This is where we locals can still just hang out.

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Report

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julia pena 1 year ago

There are enough resorts here already. we need more diverse sustainability not resorts. Malama the Aina and the Aina will malama you.

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Report

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Mary Peaks 1 year ago

The preservation of this areas historical grounds is very important.

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Report

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Maddy Snyder 1 year ago

There are enough resorts! Save the bay

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Report

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cheryl shultz 1 year ago

Hi go with my mom to watch the water. I can't believe that they want to displace numerous people who live in donor's and also elderly that live close by but think of the local tourism that the Big Island will loose Fair Winds and hula Kai operate out of the pier why sentence them also I believe there is a script coming but most of they area you want to be bungalows is the set for Baywatch Hawaii why.

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Report

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David Pursley1 year ago  
stop colonizing

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Report

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Mary De Mars1 year ago

Preserve this beautiful place

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Report

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Patricia Godfrey1 year ago

Keahou Bay is too small for another resort. Kamehameha 3's birthplace should not just be a plaque in the middle of a resort.

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Report

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Betty Beck1 year ago

No more resorts needed, keep our beach as is.

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Report

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Wayne Hemby1 year ago

Overdevelopment should be opposed. Developers are outrunning the infrastructure and drawing too many people into areas that are already stressed. It needs to stop

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Report

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Joanne A Martinez1 year ago

Please we do not need a big resort crowd & tourist bungalows on this sacred birthplace of King Kamehameha 111 to destroy the cultural activities of Native Hawaiians here.

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Report

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Janet Scanlan2 years ago

Kia Hobaiis should be retained as a harbor, and not turned into yet another resort.

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Report

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Gayle Chavez2 years ago

It is a treasure the way it is!

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Report

•

Anna Nazaryan2 years ago

Keahou bay needs to be protected. There are enough resorts already on this island.

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Report

[Alysha Kahaloa](#) 2 years ago

This is one of the last untouched beaches we have on Hawaii Island. I believe it should stay a sacred place because we already have other resorts and houses in the area. As a native Hawaiian with children, it makes me more appreciative of my sacred land and upbringing

1

Report

[LISA Cabral](#) 2 years ago

Lisa N Cabral

0

Report

[Loretta Pedersen](#) 2 years ago

I have been to this beautiful spot, and I remember Victor Llanes from being in Kona many years ago.

1

Report

[cristian younan](#) 2 years ago

This is an important space for locals, and another big resort where all the profit leaves the islands is a huge step in the wrong direction for the state.

25

1

Report

[Debbie Wareham](#) 2 years ago

Not every square inch needs to be built on. Aole to construction.

1

Report

[Valerie Wong](#) 2 years ago

Stop over building. Especially if it's for out of town buyers. Hawaii should ban the sale of real estate to people who don't pay income tax in the State of Hawaii. And charge a large tax to those who already do.....and use that money to build affordable housing and care for the homeless, and to fund quality security cameras and "Rapid Deploy System" for all 911 Operators. Keep Hawaii safe and beautiful. Take care of the people and the aina.

1

Report

[annette otoole](#) 2 years ago

We need to preserve our coastlines, their history and the wildlife for future generations, there are already too many tourist resorts on the BI. SICK AND TIRED OF GREEDY CORPORATIONS DESTROYING THE AINA. ENOUGH!!!

1

Report

26

[gena kenny](#) 2 years ago

[please don't develop this sacred land](#)

0

[Report](#)

•

[Noelle Cowell](#) 2 years ago

[Supporting](#)

0

[Report](#)

•

[Mikaela Volpicelli](#) 2 years ago

[Signing this to support my friend and her family](#) •

0

[Report](#)

•

[Jennifer Mitchell](#) 2 years ago

[We don't need any more resorts in Keauhou](#)

0

[Report](#)

•

[Matia Miyasato](#) 2 years ago

[It is beautiful as is. Why let more of our beaches/bays go to tourist. Why ruin something locals have access to](#)

0

[Report](#)

•

[Ronda Hoxsie](#) 2 years ago

[We don't need another resort. Keep the small town residential feeling.](#)

0

[Report](#)

•

[molly wallace](#) 2 years ago

[Hawaii needs to stay Hawaii - we don't need more resorts pushing the people out of Hawaii.](#)

1

[Report](#)

•

[Madelynn Brown](#) 2 years ago

[I am a tourist and saw what the land meant to the locals and I believe it should remain with the locals.](#)

1

[Report](#)

•

[Paul Koenigshofer](#) 2 years ago

[This historical and sacred place has already become over-used and abused by all the tour/ snorkel companies bringing in hundreds of carloads of tourists each day and night! Shame on the DLNR for](#)

issuing permits to these greedy tour companies! More traffic at all hours, more pollution from all the motors in the water, and alot more noise and litter. We don't want yet another poor decision from the planners and government down here! It's already suffering from too many people coming down here every day and night, and now they want to destroy what is left with a huge development and parking lot? You want this beautiful place to turn into Mauiiformia? Save Keauhou! Save our way of life and Aina. Too much tourism is killing Hawaii!. Each year, each decade the important and beautiful spots are vanishing, to become just like any other ordinary place in the World. Don't let this happen! PK

0

Report

[bini eastley](#) 2 years ago

Please leave this bay alone it is not big enough to support 100's of tourists enough already

0

Report

[Kahoku Benson](#) 2 years ago

Our Aina should stay our Aina!

0

Report

[Frank Rom](#) 2 years ago

Worked and lived in Keauhou Bay for 24 years. It is developed enough....Keep Keauhou country.

0

Report

[Lucia Kaplan](#) 2 years ago

[Kaylen Taomia](#) 2 years ago

Communities should have a say in land use. Preserve the land from non community usage.

0

Report

[Rebecca Roberts](#) 2 years ago

This area is already overcrowded.

0

Report

[Jessica Valentine](#) 2 years ago

Leave it be! Don't need to commercialize every single beautiful place in the world.

0

Report

[Mary E Wilson](#) 2 years ago

We need to leave some of this island in its pristine condition. K Hoebe is not big enough to support a tourist attraction that they are contemplating on building. Leave Keauhou Bay as it is right now.

0

Report

[Lucia Kaplan](#) 2 years ago

Keaou Bay is a special place for native Hawaiians to connect with their cultural heritage. It is already crowded with commercial businesses. It does not need more which only brings tourists crowding the site. I'm opposed to more building projects at Keaou Bay.

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Report

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**Nick Kerridge** 2 years ago

Keep keaou the same & don't change a thing

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Report

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**Marcine McBride** 2 years ago

These developers have no right to obliterate the normal and healthy recreation area already there.

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Report

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**Olga Elkaste** 2 years ago

I am signing because the land belongs to local people

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Report

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**Robin Aspman-OCallaghan** 2 years ago

I am signing because these islands are too developed as is and there should be every effort to determine what areas are still relatively close to their natural settings and not just another place for another short term rental.

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Report

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**Cynthia Luafalemana** 2 years ago

Another sold out land for profit!!! When will enough sell out be enough????

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Report

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**William Wood** 2 years ago

I want to save the bay

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Report

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**MarinA Monarrez** 2 years ago

Es muy importante!

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Report

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**Nicole Namordi** 2 years ago

We need to keep the Aina..AINAI!

for that decision in an over-crowded, commercially motivated island that has displaced it's native inhabitants.

0

Report

[Gregory Erikson](#) 2 years ago

That would just be tragic!

0

Report

[Dan Lucchesi](#) 2 years ago

More land abuse..... GOP EVIL ROTTEN BASTARDS..... August 6, 2019 Dear Americans, THE PLAGUE Ring around the polls Republicans on their toes Much to disclose Really foes Time to expose..... (published Dec. 1992) I thank the Democrats for all they have done, over the 76 years of my life. We need to speak to the people about Republican hindrance and how they have effected our countries progress and hurt most of our citizens. Starting with, President Obama, we need to inform our citizens: how the Republicans refused to pass Democratic legislation, spell out HOW it affected the country and "we citizens." Every time a congressman or congresswomen speak, have at least 1 example. Unstable 45 should be exposed.. The robber barons have been the Democratic down fall.. They are the real enemies! EXPOSE Our Governments self-serving bureaucracy Corporate greed/lack of responsibility Peoples' prejudice/loss of integrity Organized religion, the medical community Scores more.. ripping-off humanity America! The land of the free!? We need to get coverage on local News channels. Even the fox brainwashed, watch the local News. Save our Country from crimes against all Americans and the Constitution. Continue to fight. Sincerely DRI P. S. Especially the police racist policies. Name the Democratic bills that are being pigeonholed!

0

Report

[Sondra Olson](#) 2 years ago

I am signing for all the reasons given. Hawaii does not need more commercial ventures. The true beauty & appreciation of Hawaii is in enjoying nature. Please hands-off. In 20 years, so many will be so grateful

33

0

Report

[Skye Felidae](#) 2 years ago

Aina over profit. Listen to your hearts not your wallets

0

Report

[Sahara Lawrence](#) 2 years ago

I love as is!

0

Report

[Pamela Greenaway](#) 2 years ago

Keaouhou Bay can not withstand that level of development.

0

Report

[Lisa DiNatale](#) 2 years ago

This has been a very special place for me since 1980!

34

0  
 .  
 Report  
 •  
[Nalu Frias](#)2 years ago  
That's where I grew up

0  
 .  
 Report  
 •  
[Ciari Kealoha-Albarado](#)2 years ago  
[fuck colonization](#)

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 .  
 Report  
 •  
[Jayden Dougherty](#)2 years ago  
This local spot should not be ruined by tourism

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 .  
 Report  
 •  
[Karla Garcia](#)2 years ago  
This ain't right.

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 Report  
 •  
[carta baker](#)2 years ago  
We don't need any more peaceful places taken over

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 .  
 Report  
 •  
[Alice Finen](#)2 years ago  
I believe we need to protect our sacred spaces. Listen to the voices of the indigenous people. Stop turning every piece of land into something marketable.

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 .  
 Report  
 •  
[Jessica Feustel](#)2 years ago  
Sacred ground should be kept sacred. It provides something that is hard to find in the world

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 .  
 Report  
 •  
[Robert B. Demotta](#)2 years ago  
I was raised there in the early 90's and cant see beautiful Keauhou go to some bungalows! Let's all kokua in keeping Keauhou in its original beauty. I dont even have to explain but if you know, you know!

Report

- 

[Megan Matthews](#)2 years ago

bc I love my island

0

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Report

- 

[Paul Howard](#)2 years ago

No

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Report

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[Sarah Machado](#)2 years ago

Please don't spoil Keahou. Or if you insist in going forward, be a zero-waste resort and give a good kama'aina pricing!

0

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Report

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[Kathy Arnold](#)2 years ago

Please keep Hawaii the beautiful, natural place we all look forward to visiting!

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Report

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[Sherrell Watson](#)2 years ago

Enough with the resorts! Leave Keahou bay as it is for everyone to enjoy.

0

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Report

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[Kawaipio Kauahi](#)2 years ago

We do NOT NEED ANYMORE HOTELS IN RHIS AREA!!

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Report

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[John Bunnell](#)2 years ago

This property is an important cultural and recreational resource.

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Report

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[Rosalie Lentia](#)2 years ago

Keep Kona Country!!!

0

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Report

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[Meredith Stapp Ozbil](#)2 years ago

The developer seems to contradict themselves, in one hand they say there is a feeling of exclusivity with all the athletic and commercial activities that local families cannot enjoy it and on the other hand they want to build a boutique resort for the 1% tourists -- so the Bay can be enjoyed exclusively by wealthy tourists?

0

Report

•

[dolores burke](#)2 years ago

Marine ecosystems are extremely fragile, more development along this shoreline is not responsible.

0

Report

•

[Mark Enomoto](#)2 years ago

Shame on you Kamehameha Schools!

1

Report

•

[David Hunt](#)2 years ago

[I](#) [♥](#) KEAHOHU BAY. Please preserve Keauhou's culture and beauty.

0

Report

•

[janice palma-glennie](#)2 years ago

39

I've lived in or near Keauhou for most of my 40 years in Hawaii. The resources of the bay are limited, lovely, and cherished by local residents for all they provide for the health and welfare of we humans and the environment upon which we depend. Creating another exclusive enclave for the rich is far from what is needed to protect Hawaii. I nei from the ravages it's experienced in the past and is experiencing every minute by those who would exploit her.

0

Report

•

[Marla Steele](#)2 years ago

I have been here and enjoyed that it was not an over developed exploited tourist destination. I loved the chill vibe and natural beauty

0

Report

•

[Angela Mowinski](#)2 years ago

[Keep kona beautiful and pristine](#)

0

Report

•

[Mark Handy](#)2 years ago

Because Beth Athens asked me too and places like this need to be protected

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Report

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40

[Janet Myhre](#)2 years ago

Hawaii should be returned to the natives. They should decide on any changes to their historical sites.

0

Report

•

[Janet](#)2 years ago

Leave this sacred space alone...

0

Report

•

[Anna Anderson](#)2 years ago

Sounds like a good idea

0

Report

•

[Christy Tappy](#)2 years ago

Keahou Bay is a pristine Bay that us largely untouched and enjoyed by locals. Don't destroy this special place.

0

Report

•

[Elizabeth Hartig Burkart](#)2 years ago

Keep the charm of this end of Aii quiet, peaceful and a place where tourists can come to see what the real Hawaii is like. There are already plenty of rentals/accommodations and areas that cater to the tourist trade on Big Island. Be careful what you wish for...just ask some of the other islands. It's ok to say NO.

1

Report

•

[Ellen Walton](#)2 years ago

Keep Hawaiian lands Hawaiian!!!

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Report

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[Marlies Lee](#)2 years ago

Please remember the Hawaiian people and don't take over every bit of beautiful ocean front, it's their land not ours!

0

Report

•

[Brooke Torres](#)2 years ago

I'm signing because my child loves to spend time at the bay swimming and also fishing.

0

Report

•

[Sangpaguita Julian](#) 2 years ago

WE DO NOT NEED MORE HIGH RISE HOTELS. KINGDOM OF HAWAII. OUR PAE AINA. KEEP THE KINGDOM OF HAWAII IN THE HANDS OF THE KANAKA MAOLI

0

Report

[Mary Shannon](#) 2 years ago

I am from the Big Island. Our family has enjoyed Keauhou Bay for all our lives. It is beautiful the way it is... no need to build or upgrade. We love it the way it is now.

1

Report

[Lisa Diaz](#) 2 years ago

I care about protecting historic Keauhou Bay Ahupua'a ecosystem and our community. New resort development for tourism at the proposed large scale is totally inappropriate for Keauhou Bay. Keauhou Shopping Center has vacant space - they should not build more. Instead- make this area more accessible for our community, families and improve the small beach area making a park & managing trash. Allow the Hawaii County transit Trolley to access the bus stop on Kaleiopapa Street so people can access the bay without a car would improve sustainability and reduce pollution. We need to protect this area for it's cultural, historical and ecosystem - NOT over develop it for tourists and profit!

1

Report

[David Russel](#) 2 years ago

We don't need any more development in Hawaii.

0

Report

Report

[Dan Greene](#) 2 years ago

To preserve the beauty and health of Keahou bay

1

Report

[Denise Smith](#) 2 years ago

STOP THIS MADNESS!!! NO MORE RESORTS!!

0

Report

[Vanessa Lemus](#) 2 years ago

Free Hawaii

0

Report

[Nina Lominario](#) 2 years ago

No more development on our shore lines

0

• **Kayla Wolf**2 years ago  
 This needs to stay as is...No changes please.  
 0  
 .  
 Report  
 •  
**Karen Foster**2 years ago  
 Leave it alone! Stop being greedy!  
 0  
 .  
 Report  
 •  
**Edward Malinowski**2 years ago  
 At some point you have to think about when enough development is enough. Nothing will be gained by developing this area except additional exploitation of people and culture that has been exploited enough.  
 0  
 .  
 Report  
 •  
**Leina Wolcott**2 years ago  
 Please let Keauhou be! It's already suffered from pollution  
 0  
 .  
 Report  
 •  
**Don Noster**2 years ago

• **Kira Mahoe**2 years ago  
 I'm signing because this has to stop! We are not the mainland we will never be the mainland. We have more than enough resorts here...A'ole!  
 0  
 .  
 Report  
 •  
**Christopher Embernate**2 years ago  
 I don't want to see another resort in our favorite play. R and R places  
 0  
 .  
 Report  
 •  
**Leah Aquino**2 years ago  
 Enough already.  
 0  
 .  
 Report  
 •  
**Annabel Distefano**2 years ago  
 ENOUGH ALREADY! NO MORE DEVELOPEMENT AT KEAUHOU BAY! WE NEED TO PRESERVE WHAT'S LEFT OF THIS PRECIOUS, SACRED LAND!  
 0  
 .  
 Report  
 •

I lived in Kona for almost 7 years and spent a lot of time snorkeling playing cards and partying on that beach. So many great memories. Keep it the way it is please...

0

Report

•

**Lydia Hooser** 2 years ago

Keep Keauhou Bay the way it for our residents and our community

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Report

•

**Peter Fitch** 2 years ago

Let's keep this area of old Hawaii as is. Enough with the development. Have we learned nothing?

0

Report

•

**Jeanie Johnson** 2 years ago

It is a sacred place. One of the last to preserve amid the surrounding commercialization and destruction.

0

Report

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**Sue Haas** 2 years ago

Protect the bay!

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Report

•

**Stacey Bongiorno** 2 years ago

It would be a shame to loose Keahou Bay it should remain as is.

0

Report

•

**Toni Devaux** 2 years ago

I want to preserve the historical Keauhou bay

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Report

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**Jane Taylor** 2 years ago

This is well written and I agree, especially about the road, however i believe the comment period is over and i hope some were signed in time!

0

Report

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**Gay Graham** 2 years ago

I have seen far too many developments of this nature on Kaula'i and how severely they have impacted the historical, cultural and uniqueness that is Hawaiian. I hope that this petition and those preserving Hawaii's integrity are successful.

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 .  
 Report  
 •  
[Paula Williams](#)2 years ago  
[Native Hawaiian sites must be preserved.](#)

0  
 .  
 Report  
 •  
[Lawrence Mangauli](#)2 years ago  
[I was born and raised here in Kona from baby time we need place to eat go play and be free from all Buildings.](#)

0  
 .  
 Report  
 •  
[Anthony Marvin](#)2 years ago  
[I live on island and I constantly watch as locations I went to as a kid being turned into resorts or theist hot spots, it's sad because it's slowly pushing out the locals and removing areas that we can bring our own children](#)

0  
 .  
 Report  
 •  
[Brittney Kainoa](#)2 years ago  
[This should not happen](#)

0  
 .  
 Report  
 •  
[Lori Bradford](#)2 years ago  
[I care!](#)

0  
 .  
 Report  
 •  
[Promise Roback](#)2 years ago  
[It's meant for the public and everywhere is being taken over. It should be public since the pier is right there. They also have group gatherings there to learn about the history. Outsides should stop trying to take native peoples land.](#)

0  
 .  
 Report  
 •  
[Leinaala Gonsales](#)2 years ago  
[Hawaii belongs to the natives.](#)

0  
 .  
 Report  
 •  
[Tiare Makaio](#)2 years ago  
[I don't want this turned into a resort..](#)

0

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Report

•

[J Mulloy](#) 2 years ago

You want to live in a places that has tourists, but you don't want to live in a tourist town.

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Report

•

[Barbara Underwood](#) 2 years ago

Many reasons!!!! Don't build this!!

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Report

•

[Margaret Parsons](#) 2 years ago

Resorts are the antithesis if everything I love about the Big Island.

2

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Report

•

[Taylor Bear](#) 2 years ago

fuck the gentrification of our Ā'ina

2

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Report

•

[Tevita Lavaka](#) 2 years ago

It's been a an amazing outlet for youth to stay out of trouble, stay fit, and have fun. I've had some amazing memories there and it would be a shame to lose such an amazing place near to me.

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Report

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[Ashti-Nikol Alley](#) 2 years ago

This is my home.

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Report

•

[Nick Correa](#) 2 years ago

Keaouhou is a local hang out not a tourist attraction. Too many favorite local beaches are getting turned into this and it needs to fuckin stop.

1

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Report

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[Desialee Cabalar](#) 2 years ago

All of the local spots are being blocked off by gates or homes with gated communities. This is not fair the local who were born and raised here should not be locked out of their own land just because greed and money. We have something the rich want until they fully pollute and destroy it and then they no longer want it. Hawaii/ Big Island is known to a lot of tourist as the relaxing island. I do not have a problem with tourist but when you buy here on this island as a vacation home now your crowding the island so eventually it will be like Oahu where no one really thinks of it as a vacation spot. Just come stay the week

and go home. We have many many hotels and condos that can't be full all year round. Support those places that are already built.

0

Report

•

[Daven Haatic](#) 2 years ago

This is my home and I don't know why you would touch an area that's been fine since forever.

[Lisa Suttles](#) 2 years ago

•

Kahona is paradise and should stay as such

0

Report

•

[Malte Zablan](#) 2 years ago

Strictly against! Thank you, Malte Zablan

[James Ellis](#) 2 years ago

The big island is getting crowded enough with another resort.

0

Report

•

[Laurie Decasa](#) 2 years ago

Stop!!

[Sean Dooley](#) 2 years ago

There are enough beach resorts, where can the residents go when they all become resorts.

0

Report

•

[Martaina Gloor](#) 2 years ago

[We don't need another resort!](#)

[Renee Shove](#) 2 years ago

This would make me so very sad. Why do rich people feel like they need to take everything away from us and give it to the tourists?? What a shame.

0

Report

**Sandy Jilton** 2 years ago

I was a resident on Hawaii Island for 12 years. I honor the history of this historic place and the natural beauty that only it can offer. The tourism industry will destroy this area if more accommodations are constructed. Honor this place.

0

Report

**Kelly Sorenson** 2 years ago

I lived there and I care.

0

Report

**Laurie Teitelbaum** 2 years ago

I love the place to congratulate with friends. I feel that we need to keep it available for all of hawaiian residents to congregate. Please keep it for our children.

0

Report

**Cindy Holton** 2 years ago

Maintain local traditions and protect waterfront beaches!

0

55

Report

**Lori Watson** 2 years ago

Save the historical areas before it's gone.

0

Report

**Ginny Jo Minamishi** 2 years ago

This is King Kamehameha the third birth place and hold significant historical and sacred mana to the island of Hawaii. There is no more need to take and replace what is already there!!!! This piece of Hawaii that still is used by keahou canoe club and an area for little family gathering, such as Picnics and paddle boarding. Not to mention the boat ramp for fisherman and fishing grounds around the area. This place is well taken care of by the locals of the big island and hold significant Hawaiian history!!! We don't need any more hotels, condos, homes on this beach front property. It is a respectable play ground for our children and adults as well from land to water. Please save hawaii and our sacred land and history from being over built for greed and control.

0

Report

**Kaulahoolai Pilago** 2 years ago

The resort on Keahou point is way more than enough. The entire Aiihi drive is hotels, resorts, condos, vacation rentals, and multimillion dollar properties. Why must our community always conform to the greedy desires for people to exploit Hawaii. When you build stuff like this, the area that we all grew up in and have cherished memories in turns into a sad perversion of what it once was.

0

Report

56

•  
**Julie Steinbach**2 years ago

I love this island because it's not over crowded and all resorts. We love it the way it is.

0

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Report

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**Ana Tuppein**2 years ago

The ocean is a sacred place, especially keahou bay. The increase of tourism in that area will be detrimental to marine life, especially the manta rays that reside in that area.

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Report

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**Jasmin McCracken**2 years ago

Just wrong...no, please don't pave paradise to put up a parking lot. There is PLENTY of places for tourists to stay already. Too many.

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Report

•

**Ellie Tyler**2 years ago

Keep Hawaii the way it is!

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Report

•

**Matthew Kerr**2 years ago

Why ruin a good thing?

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Report

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**Vickie Pruitt**2 years ago

We already have way too many resorts on this island. This island will end up just like the rest, overcrowded with tourists.

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Report

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**Paul Dagdag**2 years ago

30+ resident of the Kealahou/Keahou ahupua'a and have witnessed the influx of traffic on both Alii and Hwy 19 roads. Adding another resort will only add more congestion to a problem of poor infrastructure.

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Report

•

**Rochelle Morais**2 years ago

This is a beautiful bay that should be protected and not be overrun by a resort

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Report

•

**[Stephen Dossey](#)**2 years ago  
Aloha aina keep Kona country

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Report

•

**[Kimberly Kekina](#)**2 years ago  
We don't need another resort!

0

Report

•

**[cathy costa](#)**2 years ago  
This is our history and culture No desecration

0

Report

•

**[braxton bailey](#)**2 years ago  
Stop the Building!

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Report

•

**[Paul Dagdag](#)**2 years ago

The place is already crowded..We need better roads and alternative routes before more development is built!

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Report

•

**[Paula Goleta](#)**2 years ago  
I'm an outrigger paddler and enjoy the sport..This club lent us canoes to race in Hawaii.

0

Report

•

**[Michele Vinz](#)**2 years ago  
We need to preserve more land on the islands.

0

Report

•

**[Edwin Gaspar](#)**2 years ago  
The area is Historical we dont need any more hotels let alone more people moving here and squeezing out local people native to Hawaii.

0

Report

•

**[Katie Lynn](#)**2 years ago

Keauhou Bay is a precious and sacred place. It deserves to stay that way. The focus should be on housing solutions for residents (in appropriate areas) and land stewardship. Not more resorts destroying the natural and historical sites.

0

Report

**Brooke Morrow** 2 years ago

No more building

0

Report

**Luis Pagan** 2 years ago

Kolohe

0

Report

**Alexis MacLeod** 2 years ago

I'm signing because there are not enough unspoiled places left in the world.

0

Report

**Alex Dullam** 2 years ago

I play volleyball down here on the weekends and I don't want to lose something that makes me happy

61

1

Report

**Kandie Kato** 2 years ago

I love Hawaii...not developing every square inch

1

Report

**Katie McKillop** 2 years ago

Please keep Keauhou just as it is. This is a historical area that needs to be kept natural with care. Aloha.

0

Report

**Maite Silva** 2 years ago

This place is an amazing place that we love and don't want it gone

1

Report

**Mystery-Lynn Freitas** 2 years ago

Hawaii needs more HOUSING for Hawaiians before we desecrate more land to serve tourists who don't live here. We need to preserve the land and beach space and act as stewards of the land - not pave over paradise and put up more parking lots.

62

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Report

•

[Jordan Bever](#)2 years ago

Resorts are gross

1

Report

•

[Heather Harvey](#)2 years ago

This is my favorite local spot to still swim, boat, and surf. If we over populate it, it will kill off the local wildlife and human life. Please stop killing the coral - and livelyhood. It's the first place I ever played volleyball on the island. Its where I go to meditate and swim in clean water. Away from the tourist . . .

5

Share

Tweet

•

Report

•

[Teddy Alejandro](#)2 years ago

Stop corporations.

0

Report

•

[Rachel Curnel Struempf](#)2 years ago

Save our beach! Please don't develop it!

0

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Report

•

[Kylee-Anne Kline](#)2 years ago

I'm signing because we have so much resorts! Not only do we have so much resorts but there is so much history behind keahou and putting a resort there would just defeat the purpose of why keahou bay is there and why it's so important

0

Report

•

[Marquesa Calderon](#)2 years ago

Respect the locals!!

0

Report

•

[Gabrielle Provencher](#)2 years ago

This is a sacred place for the Hawaiian people that should be left alone and not developed.

1

Report

•

[David Locke](#)2 years ago

Enuf! Don't turn this place into a Joni Mitchell song.

63

64

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Report

•

**Joseph Jardin**2 years ago

I've paddle there for so long you can't just take that down

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Report

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**Lakin Ferris**2 years ago

We don't need another resort on this island. That's a significant tourist and local spot where plenty people go to have fun. Putting a resort there would ruin it.

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Report

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**Robin Akau**2 years ago

I believe there should be recreational spaces in our community.

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Report

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**Carolina Medina**2 years ago

Please sign. When is enough going to be ENOUGH!??若

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Report

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**Aka 0022** years ago

I love this court! would be a shame to get rid of it.....one of the very few nice beach courts on the kona side.

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Report

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**Aaron Lanuza**2 years ago

This is a wonderful space for volleyball and beach time with my family

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Report

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**Jasper Felipe**2 years ago

[volleyball](#)

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Report

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**LaVerne Curry**2 years ago

We have enough developments. We need places for our local residents to gather and enjoy our Aina. We need to keep the volleyball courts and the canoe hale for locals.

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Report

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**Elisha Vierra**2 years ago

I want to keep keauhou bay the way it is and all it's artifacts

1

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Report

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**Matthew Idom**2 years ago

There's no need for a resort...it's only greed.

1

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Report

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**Frida Marie**2 years ago

I NEED TO AND THATS NOT OKAY TO DO!

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Report

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**Evan Curry**2 years ago

I have lived here all my life we can not let our island get over run with this kind of stuff. How about tear down the condos and build more volleyball courts

1

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Report

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67

**Davin Long**2 years ago

I really don't want it to go I love the volleyball court and another resort hell nah!

2

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Report

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**Teah Van Bergen**2 years ago

This land belongs to the people

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Report

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**Linda Mutch**2 years ago

Appalling plan for this land. We have more than enough resort developments. Please show respect and keep Keauhou Bay sacred and peaceful.

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Report

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**Ann nichols**2 years ago

This is a terrible idea for this historic area creating traffic, congestion and ruining community character. Owner at Kanaloa at Kona.

0

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Report

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**Francis Hogue**2 years ago

68

Historical! Leave it alone

1

Report

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**Vivianmalia Faagata**2 years ago

[Ancestral connection](#)

1

Report

•

**Beverly Connelly**2 years ago

I've experienced this sacred park & beach and see the history and benefit of it being easily available for locals and visitors alike...Over developing is a fine line and a new proposal of additional resort dwellings would be a tipping point for preserving access to this space. Please consider this pocket to be important enough to protect

1

Report

•

**Mary E Wilson**2 years ago

Development of these beautiful bays and coastlines has to stop! It's ruining the ecosystems of the ocean

2

Report

•

**Leslie Rae Schmitz**2 years ago

This development is completely unnecessary and will do no good only harm. The existing hotel Outrigger sits half empty and the Keauhou Shopping center commercial space is mostly vacant. The traffic corridor will be hugely disruptive. This cannot be built.

1

Report

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**Trina Alapai**2 years ago

Enough is enough!!! Listen to the Hawaiian people and do right by them. Respect. 🙏 -

2

Report

•

**Dartene Daboling**2 years ago

Please keep Keauhou Bay the way it is. PLEASE PRESERVE. Please respect Hawaii and not give to greedy people who care not about us.

1

Report

•

**ANTHONY RODRIGUES**2 years ago

These are luxury condos. A bungalow is a single level unit. Why don't they build it at the former Keauhou Beach Hotel? Or Kona Lagoon. No major development should be allowed till the Aiihi Highway is installed.

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Report

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**Janie Workman** 2 years ago

Keeping ancient Hawaiian culture is important!

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Report

**Linda Ronske** 2 years ago

Save this beautiful historic site. Build your bungalows somewhere else. This public site will then become off limits to everyone but the rich living there.

0

Report

**Deni Alley** 2 years ago

This is a sacred area and not big enough for more tourism. Respect the Aina and the folks living here. A'ole development!

0

Report

**Diane Neuman** 2 years ago

This is outrageous. There are plenty of resorts already.

0

Report

**Jeanne Alford** 2 years ago

We need to protect and embrace these sacred, neighborhood places and not allow big money and commercial developments to come in and destroy them.

0

Report

**Makanani Kaaaua** 2 years ago

Enough development for visitors Use.

0

Report

**gretel pate** 2 years ago

This is sacred land. Get yer paws off it!

0

Report

**Jeanne Roberts** 2 years ago

Kam Schools Capital has a monopoly on bays and access in Keaouhou and a pattern of taking away access from the community. Look at what they have done to Heeiea Bay!

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Report

**Deby Quandt** 2 years ago

Another resort is not needed, this peaceful place is needed.

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 Report

•  
**Sheila Braithwaite**2 years ago  
 Because I have lived on a barrier island that was ridiculously over built causing all kinds of traffic issues and environmental trauma to the National Park.it abutted. Spaces like this are so important for residents and guests. Celebrate it...don't destroy it.

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 Report

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**Pamela Welden**2 years ago  
 There is already an Outrigger Resort there. It needs renovation and reopening of its restaurant venues- that's plenty for that small little bay.

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 .  
 Report

•  
**siobhan radway**2 years ago  
 WTF!

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 .  
 Report

•  
**Sabrauna Hedenberg**2 years ago  
 KEEP HAWAII IN HAWAIIAN HANDS

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 .  
 Report

•  
**Susie Cysewski**2 years ago  
 That area needs to stay natural. Enough condos and shops already in Keauhou. Use the money to help Native Hawaiians build homes.

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 Report

•  
**Deborah Heun**2 years ago  
 We have enough big resorts don't take away another bay

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 Report

•  
**Christine Tucci**2 years ago  
 We vacation there

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 .  
 Report

•  
**Patti Donohue**2 years ago  
 I want to save this area from further development.

- 5 .  
Report  
•  
**Caleb Hoffman**2 years ago  
[Keep Hawaii's natural beauty!](#)
- 1 .  
Report  
•  
**Rhys Ward**2 years ago  
[I grew up there and don't want to see it change in a negative way.](#)
- 0 .  
Report  
•  
**Austin Llanes**2 years ago  
[Too much buildings](#)
- 1 .  
Report  
•  
**Sarah Kamanu**2 years ago  
[Keauhou bay already has a perfect balance of visitors and locals. There is no space for yet another resort of any kind to be built! The harbor is small, it is already maxed out on tourists, boats and humans](#)
- 6 .
- 0 .  
Report  
•  
**Janis Prinslow**2 years ago  
[I'm signing because there aren't any places left on the Kona side of the island that aren't overcrowded!](#)
- 0 .  
Report  
•  
**Thomas Pinkert**2 years ago  
[Let's get more affordable housing for local people instead.](#)
- 1 .  
Report  
•  
**Eliza Wille**2 years ago  
[This area does not have the infrastructure to support more development and run off into the bay will further compromise the reef and water quality.](#)
- 2 .

Report

•

**Esther Quam**2 years ago

This bay needs to be left just the way it is...It's one of our only playing grounds left for the local people of and our keikis to enjoyed without all the mainland humbug , and crowds... There going to destroy the ocean...Leave it be!!!!

1

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Report

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**Debbie Hecht**2 years ago

Keep Keahou Bay accessible...The cess pools along the north side need to be replaced by sewers.

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Report

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**Barbara Celes**2 years ago

The Keahou Bay Area is a favorite area for locals and has been for years. The many activities that occur regularly begin and end there. Making unneeded changes would spoil its existence. not to mention robbing those who continue to honor Hawaiian legacy.

9

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Report

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**Asha Keddy**2 years ago

I want to preserve the beauty and history for all

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Report

•

**Joshua Pickering**2 years ago

Keep Keahou Bay natural!

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Report

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**Valerie Vaughan**2 years ago

Not every beautiful bay needs a resort. 

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Report

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**Deeson patterson**2 years ago

It's good

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Report

•

**Tyler Wood**2 years ago

My brother and I grew up there. I still come back when I go see my family. It's been through (and is going through) enough tourist abuse. Leave it be.

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Report

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[Kathy Roney](#)2 years ago

In my lifetime, I've witnessed Oahu go from a peaceful tropical oasis to an overpopulated tourist site. Allowing this development will take away why many of us chose to live on Hawaii Island and at Keauhou Bay. We don't always need to cater to the tourist and greed. Malama `Aina!

8

Report

•

[Sally Rankin](#)2 years ago

When is enough enough!?! Kamehameha Schools claims to be ashamed of how they have managed the `aina at the bay, but this plan clearly proves they have no shame when it comes to properties they consider financially underachieving, no matter the cost.

4

Report

•

[nathan percifield](#)2 years ago

Keauhou Bay is sacred

1

Share

Tweet

Report

•

[Bryan Gazau](#)2 years ago

Less is more, keep the beaches cleaner save water sacred beaches keep sacred

79

2

Share

Tweet

Report

•

[sharon willeford](#)2 years ago

A sacred place for the local people!!! Don't OverDevelop Kona !!!!

5

Share

Tweet

Report

•

[Jacque Green](#)2 years ago

I am handicapped and elderly.. I can't get in the water where there is waves. This is one of the few places I can go!❤️

5

Share

Tweet

Report

•

[Erin Hamar](#)2 years ago

My brother's and grandmother's ashes are in this bay. I go here to be with them.. If they build a resort here how can I? Plus I paddled for Keauhou canoe club. Where will they paddle? I am strongly against this! No no no!!!!

80

We ask that you read all articles below about Big Island resources and learn that the island's resources are limited and are already being affected negatively.

All the development that has already been built, and the many years of new development that has been approved for the future, will affect the island's resources, and we ask that you STOP and look at Big Island resource to make sure that the island has the needed resources for all the development that has been built and the approved development that will be built in the future, before approving even more developments, for the safety of all who live here and visit here.

We stand and ask that you stop before approving more and more developments and learn what is happening to the island's resources and what will happen to the island's resources after the years of development that is already scheduled for the future.

Because the island's resources are being severely impacted as of today.

What will future development do to the island's resources if there are already resource issues happening today?

Please, learn how to take island resources seriously because you have approved many more years of development to come and today the island's resources are having issues.

What will the future look like if you keep approving more developments and don't start look and taking the island's resources seriously?

Read the articles below to learn what is happening to Big Island Resources

- 1) Hawaii Deals with Burgeoning Waste Management Problem  
As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

- 2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-landfill-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

- 3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste  
Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of

7

Share

Tweet

Report

Mike Dennis 2 years ago

[I love Keahou Bay and raised my kids there. I have paddled there for almost 30 years. It's a treasure.](#)

1

Share

Tweet

Report

- 1 comment was added to the list

Amanda Nixon 2 years ago

[Keahou does not need and cannot handle more condos or resorts. No no no to more development on our already fragile over crowded coast.](#)

Here is another petition that has 444 signatures (grows daily with more signatures and comments) as of Aug. 5<sup>th</sup> and it speaks about Big Island resources. It proves that the Big Island DOES NOT have the resources for another Big Resort Development.

Petition Link: <https://www.change.org/p/help-prioritize-big-island-developments-to-keep-island-s-resources-safe-for-all>

**Petition: Help Prioritize Big Island Developments to Keep Island's Resources Safe for ALL**

We stand to keep The Big Island in a place where the island's resources and infrastructure are safe for the entire population and visitors.

We stand and say homes for locals should MATTER more than mass vacation rentals.

If a home has multiple dwellings, we ask that one could be a vacation rental and the rest should be housing for locals. Local housing needs to come before vacation rentals.

This is an island and it would help the island to have a building stipulation in where the developer has to sell a high percentage to Hawaiians, and locals who have lived here for many years, to help keep the increase in population at a reasonable rate for the island's resources and infrastructure.

Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumsocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables>==

5) "The overwhelming plastic waste Hawaii visitors leave behind By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A county commission drafts ordinance aiming to ban recyclables at West Hawaii landfill By Megan Moseley September 6, 2023 · 1:00 AM HST \* Updated September 6, 2023 · 2:02 PM

Hawaii County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawaii Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca-bbi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealahehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii'i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii'i Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "BIG ISLAND NEWS HECO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST \* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) "LOCAL NEWS

HECO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii'i Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii'i Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawai'i's power system from its water system, said Kawika Uyebara, deputy director of Hawai'i County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) U.S. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues  
By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "we're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) NewsHawaii'i County issues mandatory 25% water restriction for North Kona  
August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawai'i Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai%CA%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

20) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?t=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/?t=52660)

21) "NewsHawaiian Electric asking Big Island customers to conserve power due to down generators  
March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

The articles above show that Big Island resources are currently being negatively affected from the development on island, and there are years of new development that has already been approved, and even more development is still being approved before learning if the island's resources can handle more development.

This needs to STOP, and island resources need to be addressed and taken seriously.

We stand to say LEARN WHAT IS HAPPENING TO THE ISLAND'S RESOURCES before approving more development because this is an island, and if there is not enough resources for the developments that are here now, how will there be enough resources for the developments you have approved for the future?

If the island doesn't have enough resources for the developments as of now, there won't be enough resources for developments that have not been approved as of yet, and we ask that you say NO to ALL future developments until you FULLY understand that the island's resources can accommodate future developments.

We stand and say that Big Island resources need to be FULLY considered before any more new development is approved for the safety of ALL who live here and visit.

There are many, many developments that have been approved for years to come and we stand and say we need to learn how the island's resources will be affected when these developments are finished before you keep approving more and more developments!

We stand and say NO DEVELOPING ON BURIAL GROUND. The history of the island needs to be preserved and the burial grounds need to be respected at all costs.

We stand and ask to make it mandatory for vacation rentals and ALL resorts and hotels to provide drinking water machines to their guests to help stop all the empty water bottle waste on the island.

We stand and ask to make it mandatory for vacation rentals and ALL resorts and hotels to provide shampoo, conditioner, body wash in bulk containers rather than continuously using small, different containers for every new guest, to help stop all the empty bottles waste in the limited landfill.

We ask for an Environmental Impact Report to be done to learn what is safe for Big Island resources with future developments and the population that live here now and will move here in the future.

How can we be sure to have enough landfill, water, sewer, power...for everyone? This needs to be learned.

Also, there are mostly only 2 lanes throughout the entire Big Island and some places where cars cannot pull over if an ambulance needs to get by.

The traffic has seriously increased and if the island's population keeps increasing there will be hours and hours of constant serious traffic in the near future, how will ambulances get by in emergencies?

What if there is a tsunami and people need to get to higher ground? Will they be able to get to higher ground in a safe time without the infrastructure to accommodate the increase in population?

We stand and ask that you start increasing the infrastructure to accommodate the traffic before you approve more developments.

The island's small road infrastructure isn't made for a high population and that needs to be taken seriously.

We ask for another hospital to be built, as well as a trauma center and dive chamber to be put on the island to accommodate all types of injuries because of all the years of new future development that you have already approved, these buildings will be needed.

Alii Drive is only two lanes and right now there are three huge developments in progress, and over 10 more acres of land on this street has just been approved for even more development on this street.

Did you research to learn how this one road can handle more development before your approval?

Did you research and check on the island's resources before you approved this and many other developments all over the Big Island?

We stand to say, stop development to learn how roads will handle all the new homes that you have already approved for years to come before more development is approved because right now there is serious traffic issues all over Big Island?

We stand to say what are you doing about the growth in homelessness on the island? We stand and ask that this be taken seriously.

What about parking?

All of the Big Island towns have parking issues, especially during high tourist seasons and especially Ironman.

The land at the bottom of Henery St. has been for sale for a new resort for years and the town needs parking. Would it be possible to use that land for town parking instead of another resort?

With more subdivisions comes more cars and the island towns are already overcrowded with parking issues. How will parking improve with more houses? Is the Hawaii Planning Department considering the parking issues?

There is vacant land next to Lavern's in Kona town, can you build a parking lot there?

We stand and ask for you to find a way to improve the parking issues before approving more development because parking and traffic are increasing.

87

There are over 50,000 cesspools on The Big Island. We stand to say that all cesspools be upgraded or converted into a toilet such as the one below ASAP, to stop waste water polluting in the ocean around the island.

Please, give Tax breaks to all those who change from a cesspool to a toilet such as the Cinderella Cinder <https://cinderellaeco.com/en-us> this does not use water and is a way to get rid of cesspools so they stop polluting the ocean that we all swim in today.

If you agree with this info, please sign this petition.

There are many new homes that have been approved for future development and are currently being built right now and today, the island has many resources issues before these developments are complete.

This petition states that we strongly OPPOSE approving new development applications because the island's resources are currently having serious issues, as you can see from the articles above, and many more homes have already been approved for future years of developments.

You need to learn how island resources will be affected by these years of future developments before approving more developments.

There are many big black and white signs on vacant lands that have development application information and Tax Map Key numbers for new developments and they are all over the island. What will the island become if you don't start taking island resources seriously?

The safety of all our lives is in your hands. Please, take that seriously!

Thank you for your support!

**Please read these comments because these comments and signatures MATTER AND DESERVE TO BE ACKNOWLEDGED BECAUSE THEY ARE THE HAWAIIAN PEOPLE, LOCALS AND TOURISTS!**

**Reasons for signing the above petition**

See why other supporters are signing, why this petition is important to them, and share your reason for signing (this will mean a lot to the starter of the petition).

• [Kristina Libbey](#) 1 week ago

[If the island is not protected, there will be no island. Respect the land. Respect the people.](#)

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• Report

• [Francesca LAFONTAINE-CÔTÉ](#) 2 weeks ago

88

For me it is so important to protect the nature, and the biodiversity of Hawaii. There is enough tourism and enough accommodations for tourists and the priority should be to preserve and protect the marine life and environment, not to make money! Animals were there first and they must be respected and preserved.

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Report

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**Jennifer Lund** 2 weeks ago

Environmental Impact: Pollution Risk: Developments pollute nearby waters both during and after construction. Endangered Species: Habitat for federally protected green sea turtles and endangered monk seals. Development will threaten these species due to pollution and human disturbance. Golf Course Runoff: Golf course pesticides and fertilizers lead to harmful algae blooms, killing coral and marine life. The removal of the trees that act as a natural filter will allow golf course runoff to pollute the Bay. Increased Human Activity: More tourists and residents will increase noise, water, and light pollution, further disturbing marine life. Motor Vehicle Pollution: Increased traffic from the resort will lead to more oil and heavy metal runoff into the bay. Noise Pollution: Construction and increased human activity will disrupt marine life, particularly cetaceans. Stormwater Runoff: Development will increase impervious surfaces, leading to higher stormwater runoff and pollution. Sea Foam Toxins: Pollutants in runoff can lead to toxic sea foam, affecting air quality and marine health. Scientific Evidence: NOAA & Other Studies: Developments have always polluted coastal waters, harming marine ecosystems. Coral Reefs: Runoff from developments causes coral bleaching and death, as evidenced in Hawaii and other coastal areas. Plankton Decline: Pollutants from runoff kill plankton, crucial for manta rays' diet, leading to ecosystem collapse. Algae Blooms: Pollution runoff causes algae blooms, smothering coral reefs and killing marine life. Ecosystem Research: Studies show significant negative impacts on marine ecosystems from development-related runoff. Legal Concerns: Endangered Species Act: Development violates the act's mandate to conserve habitats for endangered species. Hawaii Conservation Laws: Local statutes require conservation of indigenous aquatic life and their ecosystems. Conservation Mandate: Federal and state laws emphasize conserving ecosystems that support endangered species. Infrastructure Issues: Resource Strain: Big Island already faces water shortages, limited landfill capacity, and power conservation needs. Inadequate Infrastructure: Existing infrastructure cannot support additional strain from a large resort development. Waste Management: Big Island's landfill is nearing capacity, and new developments will exacerbate waste issues. Water Crisis: Ongoing drought and water contamination issues make additional strain from new developments unsustainable. Power Conservation: Big Island is currently experiencing power shortages and rolling blackouts, and new developments will increase demand. Case Studies: Chesapeake Bay: Coastal developments cause significant harm due to runoff, a situation Keauhou Bay could face. Hawaiian Islands: Existing research shows developments lead to severe degradation of coral reefs and marine life. Global Examples: Similar coastal developments worldwide have resulted in long-term environmental damage. Community Impact: Local Use: Keauhou Bay is a popular spot for local activities such as boating, fishing, canoeing, paddle

89

boarding, snorkeling, manta night dives, surfing, and swimming. Tourist Impact: Increased tourist activity will further degrade natural resources and disturb local wildlife. Economic Considerations: Tourism Dependence: Manta ray tours and other eco-tourism activities depend on a healthy marine environment. Local Economy: Damage to the bay's ecosystem will negatively affect local businesses reliant on marine tourism. Long-Term Costs: Environmental degradation will lead to long-term economic costs, outweighing short-term development gains. Conclusion: Long-Term Impact: Allowing the bungalow resort will permanently alter and likely destroy Keauhou Bay's ecosystem. Conservation Priority: Emphasis on conserving the bay as a natural habitat for endangered species and marine life. Community Responsibility: Urge decision-makers to consider the long-term environmental, economic, and community impacts before approving the development

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Report

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**Alexis Stubbs** 2 weeks ago

I'm not opposed to development, but I AM adamantly opposed to irresponsible development that neglects community input, resources, and access. I strongly opposed development that exploits what's left of our natural resources and Shorelines for the sake of profit. Too much already. Enough is enough. No more.

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Report

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**mark isomura** 1 month ago

Keep Kona country NO MORE STOLEN LANDS

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Report

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**KATHI BALBI** 1 month ago

Hospitals need to be updated first. Fix what you have before you build any more new construction.

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Report

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[Melissa Sobkowiec](#) 1 month ago

We need to work on the current infrastructure prior to more development.

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Report

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[Marcy O'Malley](#) 1 month ago

Enough is enough! The County needs to deal with its neglected infrastructure before allowing anymore "Resorts"

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Report

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[Pali Meneh](#) 1 month ago

No development until adequate infrastructure. Roads, water, electric, sewer, schools. All of these are already overburdened.

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Report

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[Carolan Cash](#) 2 months ago

Getting dangerous as more and more folks moving here. Plus all the proposed developments. Give us a break

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Report

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[Timothy Sullivan](#) 2 months ago

Keep Hawaii Hawaiian

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Report

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[Ferol Kolons](#) 4 months ago

I'm tired of all this development with no infrastructure. I spend so much time stuck in traffic and it's raining my life in Hawaii. I can't imagine being stuck in an ambulance that is stuck in traffic. People will die and then they'll sue the state. Infrastructure before construction!

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Report

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[Amy Lee](#) 5 months ago

The beauty and historical values are very significant. Sea turtles will lose their homes and/or become endangered. It's time to put a stop to the greedy people developing the land. What else must we endure?

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Report

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[Fatima Ayoubi](#) 1 year ago

It's important to preserve local lifestyle

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Report  
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**Joanne A Martinez**2 years ago  
Big Island residents are impacted by all the high end development promoted by real estate business, the planning department and Mayor driving the high cost to live on the island beyond affordability. Native Hawaiians r forced to leave their homeland replaced by wealthy mainlanders changing Native Hawaiian & local culture to include political views not favorable to long-established residents on Big Island. Hawaii County is becoming not much different than stateside culture. We are losing our uniqueness & delicate ecostructure is being damaged.

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Report

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**Lauren Kamauu**2 years ago  
We need to be able to live here too! We shouldn't be priced out of our homes

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Report  
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**Susan Collins**2 years ago  
Local families are priced out of housing market.

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Report  
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**Annette Reyes**2 years ago

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Report  
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**Caroline Norcross**1 year ago  
Hawaiian lands as not just for tourists and the rich.

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Report  
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**Andrea Kania**1 year ago  
The land should not be destroyed. Focus on locals being able to afford housing. Stop the greed.

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Report  
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**Justin Porter**1 year ago  
Needs to be a halt on wealthy mainlanders rushing the B.I. driving up house pricing. Many of these people don't even live here FULL-TIME.

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Report  
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**linda johns**1 year ago  
There are too many homeless locals

The laws should be that any residential property that is sold in Hawaii... must be sold to other residents that have lived here as full time residents for 5 consecutive years or more... immediately before the actual buying of the residence. Proof must be submitted including 5 years or more of their income taxes filed in Hawaii as full time residents.

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Report

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**Pam Shultise**2 years ago

We need affordable housing!

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Report

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**Jana Serion**2 years ago

Jana Serion

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Report

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**Kurt Faut**2 years ago

Simply put, the traffic on Kamehameha III Road, should this project be completed, will be similar to that fronting Hulih'e Palace and the pier. Tourists clamoring to swim and recreate on the bay, ride on the snorkel and fishing boats, and passing through to the Outrigger Keauhou Bay Hotel will irreversibly and negatively affect the peaceful nature of this gem of an ocean masterpiece. I am firmly against the construction of the through road from Ali'i Drive to the Hotel.

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Report

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**Ana Chervenak**2 years ago

My home is becoming over populated

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Report

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**CM Simon**2 years ago

I care.

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Report

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**Tracy Gonsalves**2 years ago

We are already overpopulated, our ecosystem is altered each time portions of this land is cleared to make way for another structure or roadway, this invites the outsiders of wealth to buy and continues to suppress locals and natives from living a basic or simple affordable life. This depletes and disrupts our beautiful historical hawai'i nei.

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Report

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**Frank Rom**2 years ago

Seems population growth is outpacing infrastructure development by too big a margin.

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Report

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**Ann Eshabarr2 years ago**

We need to build smart and affordable. We need to take great care with the important decisions being made. Infrastructure, roads, culturally significant land, and traffic are just a few of the things to consider. We need to move forward carefully. We must stop corruption. All money should go to where it's intended not someone's pocket. We need more auditing. Mahalo.

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Report

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**Peter Matlock2 years ago**

If all existing homes that are supposed to be hooked up to our sewer system were connected overnight, we'd already be over the capacity of the Kealakehe sewage treatment plant. We know the danger of getting into local waters with an open cut--infections take impossibly long to heal. Coral reefs and marine wildlife are suffering. Why are we making this problem worse?

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Report

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**Protect 'Opihihale Ohana2 years ago**

Ua mau ke 'ea o ka 'āina i ka pono.

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Report

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**Heidi Lee2 years ago**

We don't need more housing unless we have enough natural resources... and we need affordable housing not more second homes for people

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Report

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**Ethan Olins2 years ago**

As it is there's not nearly enough infrastructure or decent shoreline access in Kona and BI in general. Aole.

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Report

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**Duane Nakano2 years ago**

We need more affordable housing for locals. I'm in the construction industry & all I see is lots being cleared to build for outsiders.

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Report

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**Carolyn Witcover2 years ago**

There is too much housing here owned by people who only live here for a few months each year. Meanwhile the locals suffer.

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Report

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**Karen Foster2 years ago**

We already need infrastructure improvements.

98

Report

- 9 comments were added to the list

[Denise Smith](#)2 years ago

The big island can not handle MORE VEHICLES MORE PEOPLE...WITHOUT PROPER INFRASTRUCTURE!!!!

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Report

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[Aleksie Keske](#)2 years ago

Hawaii belongs to Hawaiians NOT real estate agents.

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Report

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[Catherine Watson](#)2 years ago

To save the big island don't want more people moving here

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Report

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[bini eastley](#)2 years ago

I don't want Kona to become Honolulu

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Report

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Report

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[Hanna Casagrande](#)2 years ago

I'm signing because lots of locals family's as well as local family business are being kicked out of there long time generation or just starting businesses, and family can't afford to live in there own home in which they were planning on staying in forever to raise there kid let there kids raise there kids etc... almost everyone is moving out to ocean view because it's the only thing we can afford due to lots being underpaid as an employee, so when can we ever win honestly, it's like we get this but you gotta do this how is that fair? I get we're the biggest island but not every haole has to live here vacationing is enough to make our system run, so please keep in mind to those who want to build and kick all current residents out who have been there for YEARS keep in mind that they have a family to care for and sometimes there's only ONE person who is able to work and provide for the whole entire house... be thoughtful don't ruin our lives and make us all homeless

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Report

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[Mark Axelson](#)2 years ago

Markaxelson

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Report

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[I Vazquez](#)2 years ago

I would like Hawaii Island to NOT become like the island of OAHU!

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• **Kitirena Morgan** 2 years ago

Enough is enough. Kailua Kona sewage seeping into the ocean for decades. All homes sold to people flocking in and no own who lives or born here.. one white or blue collar workers can buy a home.. I bought a house with a mortgage well over a decade ago and the price for a termite home trashed by tenants was \$250,000. Now can be sold for \$700,000. Bizarre.

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• **Report**

• **Lisa J Sims** 2 years ago

Growth in Kona has skyrocketed. Keep Kona a small town or there won't be any natural land left

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• **Report**

• **Jan Holton** 2 years ago

I agree with the issues stated in the petition.

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• **Report**

• **Deni Alley** 2 years ago

[Keep Hawaii's island country!](#)

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• **Share**

• **Tweet**

• **Report**

• **Frederick Smith** 2 years ago

No new development until we update public infrastructure like roads and sewage. It's amazing how far out of control this has gotten already.

Kamehameha Schools are the trustees, and they are legally obligated NOT ONLY BY CULTURAL LAW but also, they are LEGALLY OBLIGATED to do what is BEST for the land and their BENEFICIARIES. THE HAWAIIAN PEOPLE ARE THEIR BENEFICIARIES and thousands of their BENEFICIARIES are OPPOSING this Bungalow Resort Development and these people have a RIGHT TO BE HEARD AND ACKNOWLEDGED BY LAW!

Princess Bernice Pauahi Bishop's Will states, under 4th paragraph down from Thirteen, "I desire my trustees to provide **first and chiefly a good education** in the common English branches, and also instruction in morals and in such useful knowledge as may tend to make good and industrious men and women; and I desire instruction in the higher branches to be subsidiary to the foregoing objects.

**For the purposes aforesaid** I grant unto my said trustees full power to lease or sell any portion of my real estate...not to exceed however one-half of the fund which may come into their hands, in the purchase of suitable premises, the erection of school buildings... expend the annual income in the maintenance of said schools..." <https://www.ksbe.edu/about-us/about-pauahi/will>

Kamehameha Schools is to use the land specifically, "**For the purposes aforesaid**" and that would be education for the Hawaiian people and NOT a DEVELOP a Bungalow Resort for tourists and offer tourists an education in Hawaiian culture. This is stated clearly in Princess Bernice Pauahi Bishop's WILL.

Kamehameha Schools claims they need money and that is why they want to develop Keauhou Bay, but the truth is, they have lands that are ALREADY DEVELOPED that they hardly use, and these lands CAN BE USED TO MAKE MONEY. THEY DON'T NEED TO DEVELOP KEAUHOU BAY!

Please watch this video

<https://www.youtube.com/watch?si=7B88BIBBQd4pXaWek&v=1UtiWeyLAs&feature=youtu.be>

For example, Kaha'u'u Beach Park they only use for their Private Events and this land could bring in money through parking fees, day pass use, wedding and birthday function fees, farmers market fees, concert fees to benefit the schools... there are endless amount of ways to make money from these already developed lands.

Kamehameha Schools also has Hale Lauu that hasn't been used for years and it is fully developed with a parking lot and structures already on the land. They could use this land to school kids, house Hawaiian elders that need a home, hold weddings and events that they charge fees... but they have just let it sit there for years doing nothing.



Pauahi Bishop's Beneficiaries who are the Hawaiian people and they are stating DO NOT DEVELOP KEAUHOU BAY!

[https://www.change.org/p/save-keauhou-bay-from-becoming-a-big-crowded-resort?utm\\_source=share\\_petition&utm\\_medium=custom\\_url&recruited\\_by\\_id=92a53560-1e91-11e5-b4ef-b94e90cedb8d](https://www.change.org/p/save-keauhou-bay-from-becoming-a-big-crowded-resort?utm_source=share_petition&utm_medium=custom_url&recruited_by_id=92a53560-1e91-11e5-b4ef-b94e90cedb8d)

<https://www.change.org/p/help-prioritize-big-island-developments-to-keep-island-s-resources-safe-for-all>

Please reject this EIS because under Princess Bernice Pauahi Bishop's Will it states Kamehameha Schools are her trustees and they have a "fiduciary duty" to do what is best for **THEIR BENEFICIARIES (the Hawaiian people's) and a Bungalow Resort is BEST FOR TOURISTS NOT THE HAWAIIANA PEOPLE!**

Please reject this EIS because the Big Island DOES NOT HAVE THE RESOURCES TO PROVIDE FOR ANOTHER BIG RESORT ON ISLAND and there are many comments that agree with this fact because of the factual reported articles in the **Help Prioritize Big Island Developments to Keep Island's Resources Safe for ALL** petition <https://www.change.org/p/help-prioritize-big-island-developments-to-keep-island-s-resources-safe-for-all>

Thank you for listening to ALL OUR VOICES.

Sincerely,

Rebecca Melendez

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**From:** keahouabay <keahouabay@ksbe.edu>  
**Sent:** Tuesday, August 6, 2024 10:55 AM  
**To:** Rebecca Melendez  
**Subject:** Re: [EXTERNAL] Kamehameha Schools EIS Draft For Keahou Bay WILL HAVE NEGATIVE IMPACT

**Categories:** Red Category, Yellow Category

Aloha e Rebecca,

Thank you for your comments concerning the Keahou Bay Management Plan, Draft Environmental Impact Statement. Your comments have been received and administratively recorded.

Comments received during the 45-day public comment period will be reproduced in the Final Environmental Impact Statement, and substantive comments addressed.

Since you also provided a copy to the County of Hawai'i and our planning consultant, G70, we will not be forwarding them a duplicate copy.

We appreciate your involvement and contribution to the environmental review process. Your input is invaluable in helping us develop a management plan that reflects the needs and concerns of our community.

Thank you once again for your engagement and commitment to the future of Keahou Bay.

Mahalo,

The Keahou Bay Project Team

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**From:** Rebecca Melendez <[REDACTED]>  
**Sent:** Monday, August 5, 2024 8:35 AM  
**To:** keahouabay@g70.design <KeahouBay@g70.design>; Roy, Alex <Alex.Roy@hawaiicounty.gov>; Planning@hawaiicounty.gov <Planning@hawaiicounty.gov>; keahouabay <keahouabay@ksbe.edu>  
**Subject:** [EXTERNAL] Kamehameha Schools EIS Draft For Keahou Bay WILL HAVE NEGATIVE IMPACT

**CAUTION: This email is from an outside sender. Do not click on links or open attachments unless you recognize the sender and know the content is safe.**

To whom it may concern,

Please reject Kamehameha Schools EIS because they have NOT followed the cultural laws. By law they MUST do what is BEST for the Hawaiian people's cultural practices and it is proven developments WILL

pollute nearby waters and if these waters get polluted, the Hawaiian people will be paddling canoe, swimming, fishing...in polluted water.

Kamehameha School's Bungalow Resort Development will clear land that has been protecting Keaouhou Bay from golf course runoff pollution for years, and the development will kill an entire ecosystem.

- The "Natural Ground Cover has 10% runoff, where as development has 55% runoff..." [This was taken from NOAA'S website](#) and this researched article proves the natural land has been soaking up the above golf course pollutions before it runs into the bay for years.
- "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development..." This info was taken from [Global Corals website](#) and it SCIENTIFICALLY PROVES that their development will pollute Keaouhou Bay because of the golf course runoff that will happen.
- "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." This info is from [Environmental Evidence Journal website](#) and SCIENTIFICALLY PROVES that developments KILL CORAL AND MARINE LIFE.

Please watch this video <https://www.youtube.com/watch?v=DoKlUa9Pxt5c>

Please watch this video <https://www.youtube.com/watch?v=IT9sle0eqA0>

In their EIS they have NOT contacted as many Hawaiian people as they NEED to contact to prove that the Hawaiian people want this bungalow resort because in the ONLY public meeting they held in 2022 (I was on this zoom call) there were many people on this zoom call and EVERY SINGLE PERSON ON THIS ZOOM CALL OPPOSED THEIR BUNGALOW RESORT DEVELOPMENT and their were plenty Hawaiians on the call.

Kamehameha Schools have NOT spoken with the Kong family who are descendants from Keaouhou Bay and this video is of Kupuna Kumu Lily Kong who was born in Keaouhou Bay and she states that she is against development. She also states that her mother was against development as well. Please listen to her words in her testimonial video about Keaouhou Bay on this link and know that this proves that descendant directly from Keaouhou Bay OPPOSE THIS DEVELOPMENT <https://vimeo.com/994680462> and it is CULTURAL LAW THEY MUST BE HEARD AND ACKNOWLEDGED!

These laws were created, "After these legal victories, the Kohanaiki 'Ohana worked to create a new law in the state of Hawaii to require Cultural Impact Statements along with Environmental Impact Statements for all future large-scale development. Act 50, the Cultural Impact Statement Law was adopted in 2000." <https://kohanaikiohana.org/legal-victories>

Kupuna Kumu Lily Kong also states that there are burial grounds on the land that Kamehameha Schools wants to clear and it is told that Kamehameha Schools has bulldozed sacred land in the past and Keaouhou Bay's burial grounds MUST BE RESPECTED AND NOT DISTURBED!

I was also told by Hawaiians that there were bones in the small cave that is at the base of Keaouhou Bay. These burials need to take priority over a Bungalow Resort Development.

Kamehameha Schools has completely IGNORED this petition that OPPOSES their development resort in Keaouhou bay because when I presented this petition to them, Marissa Harman told me, "Those

signatures are just tourists" and there are many signatures that ARE tourists. The exact tourists that they want to rent too in their Bungalow Resort Development, and these people are signing a petition OPPOSING this resort development.

Also, there are thousands of signatures on this petition that are the Hawaiian people and locals, and I have sent Kamehameha Schools these signatures and the comments from this petition so they can read what Hawaiians, locals and tourists are saying about why they are OPPOSING their resort development and Kamehameha Schools has NOT read or considered that these comments have value in anyway.

There are over 6, 198 signatures as of Aug. 5<sup>th</sup> and these signatures and comments HAVE A RIGHT TO BE ACKNOWLEDGED AND THEY HAVE VALUE TO BE HEARD, THESE PEOPLE MATTER AND IT IS CULTURAL LAW THEY MUST BE ACKNOWLEDGED!

Here is the petition link: [https://www.change.org/p/save-keaouhou-bay-from-becoming-a-big-crowded-resort?utm\\_source=share\\_petition&utm\\_medium=custom\\_url&recruited\\_by\\_id=92a53560-1e91-11e5-b4ef-b94e90cedbdd](https://www.change.org/p/save-keaouhou-bay-from-becoming-a-big-crowded-resort?utm_source=share_petition&utm_medium=custom_url&recruited_by_id=92a53560-1e91-11e5-b4ef-b94e90cedbdd)

Please read and acknowledge this petition and the 6, 198 signatures (grows daily with more signatures and comments) on this petition and acknowledge the comments from the Hawaiian people, locals and tourists on this petition because I have coped ALL of comments as of today and added them below.

**Petition: Save Keaouhou Bay From Becoming a Big Crowded Resort**

Keaouhou Bay is historical sacred land. It's also a small commercial and quiet residential area, with a local canoe club that uses the bay daily, local volleyball groups that play there daily, families BBQ every weekend, hold funeral services, baptisms local kids enjoy swimming, and visitors enjoy paddle boarding and kayaking all the time without a crowd.

Read their information on this link [https://www.ksbe.edu/keaouhou\\_bay/](https://www.ksbe.edu/keaouhou_bay/)

It's possibly the last untouched historical area that has not been seriously developed and it has been a comfortable and quiet bay for locals and visitors alike for many years without a big resort crowd.

The beach is just over the size of one volleyball court that is there, with an even smaller park on the other side. It doesn't have a crowded feel and it's not big enough to become a resort area.

It is also the historical site of the birthplace of the Hawaiian people's King Kamehameha III. The area holds much history and is a very sacred area to everyone, especially the Hawaiian people.

Developers are considering building this area up and putting 150 Resort-style bungalows in this very historical, quiet, charming, and small commercial and residential area that many people have enjoyed as it is for many decades.

Not only is the area not big enough for a new resort, but there is also already a nice hotel at the point of this bay and Time Share homes right next to that.

Both of those work very well with this area and offer tourists a lot of fun places to stay without taking away from the land, its history, quietness, all the local activities, and the small commercial buildings that have been there for many years.

Updating the commercial builds that are already there would be great, and adding a nice cultural center there would be nice for everyone as well, not just tourists having bungalows.

It is important to protect small communities and special ecosystems from over development which puts too much strain on these areas.

- **Kathryn Matlock**2 days ago  
I live in Keauhou and want to have this beautiful part of Hawaii NOT ruined. Kamehameha Schools lets all of the hillside behind go. It is full of coquis as brush just waiting for a fire! Take care of the land you are already supposed to be RESPONSIBLE for!

- **Keri Johns**3 days ago  
The people who live here and pay taxes should come first.. Hawaiians should have homes first!

- **Judy MacDonald**3 days ago  
Keauhou Bay is a historical site that should be preserved for residents and visitors use.

- **Glonda Jennings**5 days ago  
I have been a visitor to this location and it is perfect just the way it is!

- **Ledias Szabo**5 days ago  
To keep Hawaii beautiful... and to protect our sea life.

- **Cyndi Wong**6 days ago  
Weina mai kākou... This sacred place is the birthplace of Kauikaouli, King Kamehameha III longest reigning monarch of Hawaii and should be preserved for generations to come. Please preserve Keauhou! E mālama i kēia āina kapu. Mahalo

To have a cultural center where people can learn more about the land, and the Hawaiian people can have a place of their own at King Kamehameha III's birthplace would be great.

Creating a walkway so the disabled can get from the Northside to the Southside would be another great add, but NOT building 150 new bungalows for a lot of people who don't even live here, who will then crowd the bay because the bay will be the focus for them staying there.

Now, besides putting another resort in this area, they want to open up the old road that has been beautifully overgrown with native plants and is located just above the canoe club and goes right through King Kamehameha III's birth site.

This will bring a lot of traffic right through this beautiful historical place where many locals hold family funerals, baptisms, birthday parties... It will overcrowd this very small special area that locals and visitors have been using for many decades, in many different loving ways.

Putting a road in could also increase the temperature there because of the pavement, and the traffic that will then pass through this beautiful, historical, sacred, and quiet area will be huge.

Trees shade this area right now very well and also help keep the erosion down by helping stop a lot of mud and debris from going into the ocean after big tropical storms that the island has sometimes. Without trees the bay could be extra muddy.

Plus, they want to add more commercial shops to Keauhou Bay, and Keauhou Shopping Center has a lot of empty For Lease stores available. To create more shops when there are shops empty and For Lease in Keauhou Shopping Center just above the bay, is not being sustainable and using what we already have.

Please HELP SAVE Keauhou Bay from becoming a big Resort area. It is one of the last historically untouched areas on the island that has not been overdeveloped and has been fully enjoyed completely by locals and visitors for many decades.

**Comments for the above petition:**  
**Reasons for signing**

See why other supporters are signing, why this petition is important to them, and share your reason for signing (this will mean a lot to the starter of the petition).

- **Lisa Lopez**1 day ago  
Please stop building and adding more to areas that need open space...it's too crowded already.

- **Elizabeth A Goehner**2 days ago  
Want to save Kealakua Bay from being destroyed by more new developments

- **Gina Harvey**2 days ago

and trash. Government is here to serve the community not promote a business that cause irreparable harm to the people and animals who leave. We don't want it.

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Report

**Karen Kenyon** 2 weeks ago

I believe that preserving the bay is absolutely vital — this project does not do this. It will also add to traffic and increase noise for those with condos in the area.

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Report

**Elizabeth Martin** 2 weeks ago

There is too much development in Kona with no regard for the sacred spaces which are demolished for the GREED of developers. STOP ruining this beautiful sacred island!

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Report

**patrice rammer** 2 weeks ago

Patrice Rammer

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Report

**Jennifer Cramer** 2 weeks ago

**Terri Yoshinaga** 7 days ago

Problem: Kamehameha Schools wants Keauhou Bay to become a Bungalow Resort. This is a VERY small bay. The Resort will have 105 rooms that means 200+ more people in this small area. This will have serious negative impacts on the bay like more pollution, traffic congestion, negatively affect the endanger species there and more!

**Ron Dias** 1 week ago

Ron Dias

**Kathleen Delorme** 1 week ago

Turning this into a resort will lead to over-crowding, congestion, pollution and environmental and social problems unneeded by the area to flourish and sustain life respectfully!

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Report

**Janet Berketa** 1 week ago

this project is very environmentally destructive, and bad for our climate.

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Report

**Fran copp** 1 week ago

The Keauhou Bay should be protected as is bc the island needs to be protected for the recreation of the residents. It would be ruined if that many units for short term rentals were put in such a small place. It would pollute the environment and change the habitat for the animals that live there for the benefit of the golf course. In 10-20 years the place would be trashed. It's a small location not able to handle the traffic.

Jennifer Cramer

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Report

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**annie jay** 2 weeks ago

We need to stop overbuilding and destroying such delicate ecosystems.

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Report

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**GARY PRAHL** 2 weeks ago

I want keahou to remain undeveloped! Leave the area alone to enjoyed by locals and visitors as it is!

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Report

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**Michelle Melendez** 2 weeks ago

I want to save the bay!

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Report

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**Jennifer Lund** 2 weeks ago

Enough is enough... Short term financial gain is not worth it. Environmental Impact: Pollution Risk: Developments pollute nearby waters both during and after construction. Endangered Species: Habitat for federally protected green sea turtles and endangered monk seals... Development will threaten these

species due to pollution and human disturbance. Golf Course Runoff: Golf course pesticides and fertilizers lead to harmful algae blooms, killing coral and marine life. The removal of the trees that act as a natural filter will allow golf course runoff to pollute the Bay. Increased Human Activity: More tourists and residents will increase noise, water, and light pollution, further disturbing marine life. Motor Vehicle Pollution: Increased traffic from the resort will lead to more oil and heavy metal runoff into the bay. Noise Pollution: Construction and increased human activity will disrupt marine life, particularly cetaceans. Stormwater Runoff: Development will increase impervious surfaces, leading to higher stormwater runoff and pollution. Sea Foam Toxins: Pollutants in runoff can lead to toxic sea foam, affecting air quality and marine health. Scientific Evidence: NOAA & Other Studies: Developments have always polluted coastal waters, harming marine ecosystems. Coral Reefs: Runoff from developments causes coral bleaching and death, as evidenced in Hawaii and other coastal areas. Plankton Decline: Pollutants from runoff kill plankton, crucial for manta rays' diet, leading to ecosystem collapse. Algae Blooms: Pollution runoff causes algae blooms, smothering coral reefs and killing marine life. Ecosystem Research: Studies show significant negative impacts on marine ecosystems from development-related runoff. Legal Concerns: Endangered Species Act: Development violates the act's mandate to conserve habitats for endangered species. Hawaii Conservation Laws: Local statutes require conservation of indigenous aquatic life and their ecosystems. Conservation Mandate: Federal and state laws emphasize conserving ecosystems that support endangered species. Infrastructure Issues: Resource Strain: Big Island already faces water shortages, limited landfill capacity, and power conservation needs. Inadequate Infrastructure: Existing infrastructure cannot support additional strain from a large resort development. Waste Management: Big Island's landfill is nearing capacity, and new developments will exacerbate waste issues. Water Crisis: Ongoing drought and water contamination issues make additional strain from new developments unsustainable. Power Conservation: Big Island is currently experiencing power shortages and rolling blackouts, and new developments will increase demand. Case Studies: Chesapeake Bay: Coastal developments cause significant harm due to runoff, a situation Keahou Bay could face. Hawaiian Islands: Existing research shows developments lead to severe degradation of coral reefs and marine life. Global Examples: Similar coastal developments worldwide have resulted in long-term environmental damage. Community Impact: Local Use: Keahou Bay is a popular spot for local activities such as boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. Tourist Impact: Increased tourist activity will further degrade natural resources and disturb local wildlife. Economic Considerations: Tourism Dependence: Manta ray tours and other eco-tourism activities depend on a healthy marine environment. Local Economy: Damage to the bay's ecosystem will negatively affect local businesses reliant on marine tourism. Long-Term Costs: Environmental degradation will lead to long-term economic costs, outweighing short-term development gains. Conclusion: Long-Term Impact: Allowing the bungalow resort will permanently alter and likely destroy Keahou Bay's ecosystem. Conservation Priority: Emphasis on conserving the bay as a natural habitat for endangered species and marine life. Community Responsibility: Urge decision-makers to consider the long-term environmental, economic, and community impacts before approving the development

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Report

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**Anne Yelken**2 weeks ago  
Sacred land should be protected and kept pristine. Keep the Bay intact with its beauty and historical value. Leave it as it is!

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Report

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**marsha stafford**2 weeks ago

We do not have the roads nor infrastructure for more development

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Report

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**Stéphane Kunicki**3 weeks ago

Over développement on the island has already lead to destruction of coral reefs and natural.... Read more

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Report

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**Barbara Jossy**3 weeks ago

Too much development already.

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Report

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**cathy costa**3 weeks ago

**Ann Eshabarr**2 weeks ago  
This is sacred land. There's enough going on already on the bay so leave it alone. I am very concerned about traffic and more water pollution. This is a terrible idea.

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Report

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**Yemaya Indira DUBY**2 weeks ago

Save this fragile eco-system!!

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Report

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**Ru Cartley**2 weeks ago

Very concerned & opposed to more tourist accommodations as we face less and less housing. Greedy developers, enough is enough!

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Report

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**Lori Sceates**2 weeks ago

We do not need, nor want, this kind of development!

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Report

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I am signing it because I grew up there and it is our grama land Victoria kamamalu She never relinquished it

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Report

**Lili Leong**4 weeks ago

He ali'ika 'āina, he kauwā ke kanaka. Stop selling our wahi pana to people who can not possibly understand.

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Report

**ann mooney**4 weeks ago

no more development, please.

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Report

**Sherri Bugenhagen**4 weeks ago

I believe that this area should be saved from development and let it continue as is... a very scared area

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Report

**Veronica Duguran**4 weeks ago

We need to keep our beaches and town how it is. How we grew up, where our kids can grow up. We get moving forward but at the same time we need Hawaii to stay Hawaii and not make it look like Oahu.

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Report

**Allison Shapiro**4 weeks ago

It's a special and sacred place! Let's protect it.

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Report

**Mary Bradley**4 weeks ago

I love visiting the Big Island because of the vibe. Another big resort development will ruin this place and I'll take my tourist money elsewhere. This island cannot sustain more development. More development makes the rich richer and robs the the people of the island. The environment cannot withstand more development.

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Report

**Jen Ball**4 weeks ago

I have come to this area for years, and it would be travesty to build yet another hotel in a time of global warming and climate change. The Outrigger can barely keep it together! No more big hotels!

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Report

**Ashtlee Johnson** 1 month ago

We need natural wild places...not more homes

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Report

**Jennifer Stabrylla** 1 month ago

So many people have enjoyed the bay as it is for decades. We appreciate it as a serene spot with access to swimming and paddling and quiet times. I am certain that that will all be taken away by development, and we cannot abide losing this spot and the desecration of a truly sacred space.

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Report

**Janene Lasswell** 1 month ago

This project is not in alliance with the general plan for Hawaii County. County residents need more affordable housing in areas already zoned for residences. County residents need more beach parks for free recreation, for which this bay is zoned, according to the 2045 General Plan. Bishop Estate/KSBE had net assets of 1.1B (eleven billion) dollars on their 2022 Form 990. Enough is enough.

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Report

**Cory Harden** 1 month ago

enough hotels already!

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Report

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**Marjorie Erway** 1 month ago

It's an inappropriate development for the area.

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Report

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**Louise Pape** 1 month ago

Far too much of our resources are being destroyed—we MUST save whatever is left. Money has taken us over far too much. Mahalo

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Report

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**Crista Morones** 1 month ago

Because its an HISTORICAL SACRED BAY!!!

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Report

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**Robert Kirkpatrick** 1 month ago

Have you seen what the manta tours has done to keauhou? It's so overcrowded you can even park! Where the people gonna go? Enough is enough already!

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Report

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[Vanecia Lourenco](#) 1 month ago

I want the Hawaiian culture to stay alive

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Report

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[Hana Wilhovsky](#) 2 months ago

Construction of hotels or places for tourists would eliminate the small businesses that are able to provide educational and fun opportunities for those visiting. Lack of tourist education can cause ignorance and destruction of the natural environment that makes Hawaii so beautiful.

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Report

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[Olivia Payne](#) 2 months ago

If I was in the same shoes as the locals I would not want disrespectful people harming the island and treating it as a piece of trash

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Report

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[Aubrey Featherston](#) 2 months ago

This is an incredibly beautiful spot and I'd hate to see it get bulldozed over and become inaccessible

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Report

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[Jenn Dant](#) 2 months ago

Coastal development can cause chronic sedimentation, sewage effluent, industrial discharge, changes in water flow and run off which can affect coral, contributing to climate change, increasing ocean acidification, and threatening coral reef ecosystems.

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Report

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[elliott Glover](#) 2 months ago

The bay needs saving

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Report

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[Amaya Dorman Mackenzie](#) 2 months ago

Truly a beautiful and sacred site. Seeing the amount of unused property which already exists on the island in and of itself wasteful, but then to add yet more vacation homes to a place which has deep meaning is insensitive and shortsighted. As the description of the petition here says.....Read more

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Report

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[Max Hollomon](#) 2 months ago

Natural beauty and animals should be protected we see too many get lost to profit

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Report

- [Alexandra Saffery](#) 2 months ago  
Locals can't even afford the hotels. We need money and development on our schools, roads, hospitals, open space, shoreline access. Not more strain and tourism
- 0
- **Report**
- [Rick Davis](#) 2 months ago  
I live in Hahaione and paddleboard almost every day in Keauhou Bay. The waters are pristine, filled with life, and uncrowded. I often see manta, dolphin, sea turtles, shark and many other kinds of fish.... Read more
- 0
- **Report**
- [caroline MARONGIU](#) 2 months ago  
We don't need this resort. The island needs to stay wild and authentic. Destroying such a beautiful place is disgusting and disrespectful for the land and native.
- 0
- **Report**
- [Virginia Garza](#) 2 months ago  
Virginia garza
- 0
- **Report**
- [Devra Dynes](#) 2 months ago  
Big Island has very few beaches to enjoy. Don't want pockets of Honolulu scattered all around Island! Tourism has high costs for all; look what's happened to Kailua??
- 0
- **Report**
- [Mary Burke Monroe](#) 2 months ago  
There are enough resort type developments on the West side of the Big Island already. Keauhou Bay is much too small and this type of development would destroy the peace and tranquility of the area. There is already a hotel and time share units in the direct vicinity. There is no need for further congestion and destruction of this sacred site.
- 0
- **Report**
- [Machaela Bailey](#) 2 months ago  
There is way too much tourism on island yes it brings in money but it also brings car accidents over populating sicknesses like covid and invasive species being brought here enough already there's no more room and it's causing way too many issues for all of us!!!
- 0
- **Report**
- [Carolan Cash](#) 2 months ago  
No more development. There's a resort already. Enough. Our infrastructure cannot handle more and more.

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Report

Lorrie Taylor2 months ago

No more tourist based development!

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Report

William Morris2 months ago

Too much development already. Losing Hawaii identity.

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Report

sarah coatts2 months ago

Keaouhou Bay is historical sacred land.

0

Report

Big Island Love3 months ago

We do not need more resorts!

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Report

Carrie Lee Hedrick1 year ago

This bay is beautiful and should not be changed.

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Report

Lyn Acia1 year ago

It's in an unnecessary location that doesn't allow our community to access the small park and beach. The coastlines on each side are already difficult to get too. This is one of the last places for our picnic gatherings

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Report

Lucas Felipe1 year ago

Pelo meio ambiente

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Report

Leiana Sine1 year ago

Enough of our land has been exploited for the continents money

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Report

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[bini easley](#) 1 year ago

Such a small historical place leave it alone

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Report

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[Andrew Roberts](#) 1 year ago

This is a very special spot where you still can canoe paddle and feel like you're still living in Hawaii. Just come down and watch the kids playing in the water and fishing. This is where we locals can still just hang out.

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Report

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[julia pena](#) 1 year ago

There are enough resorts here already. we need more diverse sustainability not resorts. Malama the Aina and the Aina will malama you.

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Report

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[Mary Peaks](#) 1 year ago

The preservation of this areas historical grounds is very important.

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Report

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[Maddy Snyder](#) 1 year ago

There are enough resorts! Save the bay

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Report

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[cheryl shultz](#) 1 year ago

Hi go with my mom to watch the water. I can't believe that they want to displace numerous people who live in donor's and also elderly that live close by but think of the local tourism that the Big Island will loose Fair Winds and hula Kai operate out of the pier why sentence them also I believe there is a script coming but most of they area you want to be bungalows is the set for Baywatch Hawaii why.

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Report

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[David Pursley](#) 1 year ago

stop colonizing

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Report

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[Mary De Mars](#) 1 year ago

Preserve this beautiful place

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Report

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[Patricia Godfrey](#) 1 year ago

Keahou Bay is too small for another resort. Kamehameha 3's birthplace should not just be a plaque in the middle of a resort.

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Report

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[Betty Beck](#) 1 year ago

No more resorts needed. keep our beach as is.

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Report

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[Wayne Hemby](#) 1 year ago

Overdevelopment should be opposed. Developers are outrunning the infrastructure and drawing too many people into areas that are already stressed. It needs to stop

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Report

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[Joanne A Martinez](#) 1 year ago

Please we do not need a big resort crowd & tourist bungalows on this sacred birthplace of King Kamehameha 111 to destroy the cultural activities of Native Hawaiians here.

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Report

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Report

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[Janet Scanlan](#) 2 years ago

Kia Hobais should be retained as a harbor, and not turned into yet another resort.

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Report

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[Gayle Chavez](#) 2 years ago

It is a treasure the way it is!

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Report

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[Anna Nazaryan](#) 2 years ago

Keahou bay needs to be protected. There are enough resorts already on this island.

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Report

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[Alysha Kahaloa](#) 2 years ago

This is one of the last untouched beaches we have on Hawaii Island. I believe it should stay a sacred place because we already have other resorts and houses in the area. As a native Hawaiian with children, it makes me more appreciative of my sacred land and upbringing

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Report

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Stop over building. Especially if it's for out of town buyers. Hawaii should ban the sale of real estate to people who don't pay income tax in the State of Hawaii. And charge a large tax to those who already do.....and use that money to build affordable housing and care for the homeless.. and to fund quality security cameras and "Rapid Deploy System" for all 911 Operators. Keep Hawaii safe and beautiful. Take care of the people and the aina.

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Report  
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[annette otoole](#)2 years ago  
We need to preserve our coastlines, their history and the wildlife for future generations.. there are already too many tourist resorts on the BI.. SICK AND TIRED OF GREEDY CORPORATIONS DESTROYING THE AINA.. ENOUGH!!!

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Report  
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[gena kenny](#)2 years ago  
please don't develop this sacred land

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Report  
•  
[Noelle Cowell](#)2 years ago  
Supporting

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Report  
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Report

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[LISA Cabral](#)2 years ago  
[Lisa N Cabral](#)

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Report  
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[Loretta Pedersen](#)2 years ago  
I have been to this beautiful spot.. and I remember Victor Llanes from being in Kona many years ago.

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Report  
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[cristian younan](#)2 years ago  
This is an important space for locals.. and another big resort where all the profit leaves the islands is a huge step in the wrong direction for the state.

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Report  
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[Debbie Wareham](#)2 years ago  
Not every square inch needs to be built on.. Aole to construction.

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Report  
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[Valerie Wong](#)2 years ago

Hawaii needs to stay Hawaii - we don't need more resorts pushing the people out of Hawaii.

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Report

**Madelynn Brown**2 years ago

I am a tourist and saw what the land meant to the locals and I believe is should remain with the locals.

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Report

**Paul Koenigshofer**2 years ago

This historical and sacred place has already become over-used and abused by all the tour/snorkel companies bringing in hundreds of carloads of tourists each day and night! Shame on the DLNR for issuing permits to these greedy tour companies! More traffic at all hours, more pollution from all the motors in the water, and alot more noise and litter. We don't want yet another poor decision from the planners and government down here! It's already suffering from too many people coming down here every day and night, and now they want to destroy what is left with a huge development and parking lot? You want this beautiful place to turn into Mauiformia? Save Keauhou! Save our way of life and Aina. Too much tourism is killing Hawaii. Each year, each decade the important and beautiful spots are vanishing, to become just like any other ordinary place in the World. Don't let this happen! PK

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Report

**bini eastley**2 years ago

Please leave this bay alone it is not big enough to support 100's of tourists enough already

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**Mikaela Volpice**12 years ago

Signing this to support my friend and her family .

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Report

**Jennifer Mitchell**2 years ago

We don't need any more resorts in Keauhou.

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Report

**Malia Miyasato**2 years ago

It is beautiful as is. Why let more of our beaches/bays go to tourist. Why ruin something locals have access to

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Report

**Ronda Hoxsie**2 years ago

We don't need another resort. Keep the small town residential feeling.

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Report

**molly wallace**2 years ago

Report

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[Kahoku Benson](#) 2 years ago

[Our Aina should stay our Aina!](#)

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Report

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[Frank Rom](#) 2 years ago

[Worked and lived in Keauhou Bay for 24 years. It is developed enough....Keep Keauhou country.](#)

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Report

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[Kaylen Taomia](#) 2 years ago

[Communities should have a say in land use. Preserve the land from non community usage.](#)

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Report

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[Rebecca Roberts](#) 2 years ago

[This area is already overcrowded.](#)

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Report

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[Jessica Valentine](#) 2 years ago

[Leave it be! Don't need to commercialize every single beautiful place in the world.](#)

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Report

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[Mary E Wilson](#) 2 years ago

[We need to leave some of this island in its pristine condition. K Hoebe is not big enough to support a tourist attraction that they are contemplating on building. Leave Keauhou Bay as it is right now.](#)

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Report

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[Lucia Kaplan](#) 2 years ago

[Keauhou Bay is a special place for native Hawaiians to connect with their cultural heritage. It is already crowded with commercial businesses. It does not need more which only brings tourists crowding the site. I'm opposed to more building projects at Keauhou Bay.](#)

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Report

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[Nick Kerridge](#) 2 years ago

[Keep keahou the same & don't change a thing](#)

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Report

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[Marcine McBride](#)2 years ago

These developers have no right to obliterate the normal and healthy recreation area already there.

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Report

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[Olga Elkaslas](#)2 years ago

I am signing because the land belongs to local people

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Report

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[Robin Aspman-OCallaghan](#)2 years ago

I am signing because these islands are too developed as is and there should be every effort to determine what areas are still relatively close to their natural settings and not just another place for another short term rental.

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Report

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[Cynthia Luafalemana](#)2 years ago

Another sold out land for profit!!! When will enough sell out be enough????

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Report

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[William Wood](#)2 years ago

[I want to save the bay](#)

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Report

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[MarinA Monarrez](#)2 years ago

[Es muy importante!](#)

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Report

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[Nicole Namordi](#)2 years ago

We need to keep the Aina..AINAI!!

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Report

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[Gregory erikson](#)2 years ago

That would just be tragic!

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Report

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[Dan Lucchesi](#)2 years ago

More land abuse..... GOP EVIL ROTTEN BASTARDS..... August 6, 2019 Dear Americans, THE PLAGUE Ring around the polls Republicans on their toes Much to disclose Really foes Time to expose.....(published Dec. 1992) I thank the Democrats for all they have done...over the 76 years of my life. We need to speak to

the people about Republican hindrance and how they have effected our countries progress and hurt most of our citizens. Starting with President Obama, we need to inform our citizens: how the Republicans refused to pass Democratic legislation, spell out HOW it affected the country and "we citizens." Every time a congressman or congresswomen speak, have at least 1 example. Unstable 45 should be exposed.. The robber barons have been the Democratic down fall.. They are the real enemies! EXPOSE Our Governments self-serving bureaucracy Corporate greed/lack of responsibility Peoples' prejudice/loss of integrity Organized religion, the medical community Scores more.. ripping-off humanity America! The land of the free!? We need to get coverage on local News channels.. Even the fox brainwashed, watch the local News. Save our Country from crimes against all Americans and the Constitution.. Continue to fight.. Sincerely DRL P.S. Especially the police racist policies.. Name the Democratic bills that are being pigeonholed!

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Report

**Sondra Olson** 2 years ago

I am signing for all the reasons given. Hawaii does not need more commercial ventures. The true beauty & appreciation of Hawaii is in enjoying nature. Please hands-off. In 20 years, so many will be so grateful for that decision in an over-crowded, commercially motivated island that has displaced it's native inhabitants.

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Report

**Skye Felidae** 2 years ago

Aina over profit.. Listen to your hearts not your wallets

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Report

**Sahara Lawrence** 2 years ago

I love as is!

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Report

**Pamela Greenaway** 2 years ago

Keauhou Bay can not withstand that level of development.

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Report

**Lisa DiNatale** 2 years ago

This has been a very special place for me since 1980!

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Report

**carta baker** 2 years ago

We don't need any more peaceful places taken over

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Report

**Alice Finen** 2 years ago

I believe we need to protect our sacred spaces. Listen to the voices of the indigenous people. Stop turning every piece of land into something marketable.

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Report  
•  
[Jayden Dougherty](#)2 years ago  
[This local spot should not be ruined by tourism](#)

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Report  
•  
[Karla Garcia](#)2 years ago  
[This ain't right.](#)

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Report  
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[Megan Matthews](#)2 years ago  
[bc I love my island](#)

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Report  
•  
[Paul Howard](#)2 years ago  
[No](#)

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Report  
•  
[Jessica Feustel](#)2 years ago  
[Sacred ground should be kept sacred. It provides something that is hard to find in the world](#)

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Report  
•  
[Robert B. Demotta](#)2 years ago  
[I was raised there in the early 90's and cant see beautiful Keauhou go to some bungalows! Let's all kokua in keeping Keauhou in its original beauty. I dont even have to explain but if you know, you know!](#)

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Report  
•  
[Nalu Frias](#)2 years ago  
[That's where I grew up](#)

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Report  
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[Ciari Kealoha-Albarado](#)2 years ago  
[fuck colonization](#)

Report

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[Sarah Machado](#) 2 years ago

Please don't spoil Keahou...Or if you insist in going forward, be a zero-waste resort and give a good kama'aina pricing!

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Report

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[Kathy Arnold](#) 2 years ago

Please keep Hawaii the beautiful, natural place we all look forward to visiting!

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Report

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[Sherrel Watson](#) 2 years ago

Enough with the resorts! Leave Keahou bay as it is for everyone to enjoy.

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Report

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[Kawaipio Kauahi](#) 2 years ago

We do NOT NEED ANYMORE HOTELS IN RHIS AREA!

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Report

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[John Bunnell](#) 2 years ago

This property is an important cultural and recreational resource.

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Report

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[Rosalie Lenta](#) 2 years ago

Keep Kona Country!!!

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Report

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[Meredith Stapp Ozbil](#) 2 years ago

The developer seems to contradict themselves, in one hand they say there is a feeling of exclusivity with all the athletic and commercial activities that local families cannot enjoy it and on the other hand they want to build a boutique resort for the 1% tourists - so the Bay can be enjoyed exclusively by wealthy tourists?

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Report

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[dolores burke](#) 2 years ago

Marine ecosystems are extremely fragile, more development along this shoreline is not responsible.

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Report

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[Mark Enomoto](#) 2 years ago

Shame on you Kamehameha Schools!

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Report

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[David Hunt](#) 2 years ago

🇺🇸 KEAHOHU BAY. Please preserve Keauhou's culture and beauty.

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Report

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[Janice palma-glennie](#) 2 years ago

I've lived in or near keauhou for most of my 40 years in hawaii. The resources of the bay are limited, lovely, and cherished by local residents for all they provide for the health and welfare of we humans and the environment upon which we depend. Creating another exclusive enclave for the rich is far from what is needed to protect Hawaii. I nei from the ravages it's experienced in the past and is experiencing every minute by those who would exploit her.

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Report

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[Marla Steele](#) 2 years ago

I have been here and enjoyed that it was not an over developed exploited tourist destination. I loved the chill vibe and natural beauty

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Report

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[Angela Mowinski](#) 2 years ago

[Keep kona beautiful and pristine](#)

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Report

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[Mark Handy](#) 2 years ago

Because Beth Athens asked me too and places like this need to be protected

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Report

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[Janet Myhre](#) 2 years ago

Hawaii should be returned to the natives. They should decide on any changes to their historical sites.

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Report

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[Janet](#) 2 years ago

[Leave this sacred space alone...](#)

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Report

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[Anna Anderson](#) 2 years ago

Sounds like a good idea

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Report

•  
**Christy Tappy**2 years ago

Keahou Bay is a pristine Bay that us largely untouched and enjoyed by locals. Don't destroy this special place.

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Report

•  
**Elizabeth Hartig Burkart**2 years ago

Keep the charm of this end of Aii quiet, peaceful and a place where tourists can come to see what the real Hawaii is like. There are already plenty of rentals/accommodations and areas that cater to the tourist trade on Big Island. Be careful what you wish for....just ask some of the other islands..it's ok to say NO.

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Report

•  
**Ellen Walton**2 years ago

Keep Hawaiian lands Hawaiian!!!

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Report

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**Marlies Lee**2 years ago

Please remember the Hawaiian people and don't take over every bit of beautiful ocean front, it's their land not ours!

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Report

•  
**Brooke Torres**2 years ago

I'm signing because my child loves to spend time at the bay swimming and also fishing.

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Report

•  
**Sangpaguitta Jutian**2 years ago

WE DO NOT NEED MORE HIGH RISE HOTELS. KINGDOM OF HAWAII. OUR PAE AINA. KEEP THE KINGDOM OF HAWAII IN THE HANDS OF THE KANAKA MAOLI

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Report

•  
**Mary Shannon**2 years ago

I am from the Big Island. Our family has enjoyed Keahou Bay for all our lives. It is beautiful the way it is... no need to build or upgrade. We love it the way it is now.

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Report

•

**Lisa Diaz**2 years ago

Learn about protecting historic Keahou Bay Ahupua'a ecosystem and our community. New resort development for tourism at the proposed large scale is totally inappropriate for Keahou Bay. Keahou Shopping Center has vacant space - they should not build more. Instead - make this area more accessible for our community, families and improve the small beach area making a park & managing trash. Allow the Hawaii County Transit Trolley to access the bus stop on Kaleiopapa Street so people can access the bay without a car would improve sustainability and reduce pollution. We need to protect this area for it's cultural, historical, and ecosystem - NOT over develop it for tourists and profit!

1

Report

**David Russel**2 years ago

We don't need any more development in Hawaii.

0

Report

**Dan Greene**2 years ago

To preserve the beauty and health of Keahou bay

1

Report

**Denise Smith**2 years ago

STOP THIS MADNESS!!! NO MORE RESORTS!!

0

Report

**Vanessa Lemus**2 years ago

Free Hawaii

0

Report

**Nina Lominario**2 years ago

No more development on our shore lines

0

Report

**Kira Mahoe**2 years ago

I'm signing because this has to stop! We are not the mainland we will never be the mainland. We have more than enough resorts here.. 'A'ole!

0

Report

**Christopher Embemate**2 years ago

I don't want to see another resort in our favorite play. R and R places

0

Report

Leah Aquino2 years ago  
Enough already.

0

Report

•

Annabel Distefano2 years ago

ENOUGH ALREADY! NO MORE DEVELOPEMENT AT KEAHOHOU BAY! WE NEED TO PRESERVE WHAT'S LEFT OF THIS PRECIOUS, SACRED LAND!

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Report

•

Kayla Wolf2 years ago

This needs to stav as is...No changes please.

0

Report

•

Karen Foster2 years ago

Leave it alone! Stop being greedy!

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Report

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Edward Malinowski2 years ago

At some point you have to think about when enough development is enough. Nothing will be gained by developing this area except additional exploitation of people and culture that has been exploited enough.

0

Report

•

Leina Wolcott2 years ago

Please let Keauhou be! It's already suffered from pollution

0

Report

•

Don Noster2 years ago

I lived in Kona for almost 7 years and spent a lot of time snorkeling playing cards and partying on that beach...So many great memories. Keep it the way it is please...

0

Report

•

Lydia Hooser2 years ago

Keep Keauhou Bay the way it for our residents and our community

0

Report

•

Peter Fitch2 years ago

Let's keep this area of old Hawaii as is...Enough with the development. Have we learned nothing?

- 0 .  
Report
- [Jane Taylor](#)2 years ago  
This is well written and I agree, especially about the road, however i believe the comment period is over and i hope some were signed in time!
- 0 .  
Report
- [Gay Graham](#)2 years ago  
I have seen far too many developments of this nature on Kauai and how severely they have impacted the historical, cultural and uniqueness that is Hawaiian. I hope that this petition and those preserving Hawaii's integrity are successful.
- 0 .  
Report
- [Lori Bradford](#)2 years ago  
I care!
- 0 .  
Report
- [Promise Roback](#)2 years ago  
It's meant for the public and everywhere is being taken over. It should be public since the pier is right there. They also have group gatherings there to learn about the history. Outsides should stop trying to take native peoples land.
- 0 .  
Report
- [Toni Devaux](#)2 years ago  
I want to preserve the historical Keauhou bay
- 0 .  
Report
- [Stacey Bongiorno](#)2 years ago  
It would be a shame to loose Keahou Bay it should remain as is.
- 0 .  
Report
- [Sue Haas](#)2 years ago  
Protect the bay!
- 0 .  
Report
- [Jeanie Johnson](#)2 years ago  
It is a sacred place. One of the last to preserve amid the surrounding commercialization and destruction.

0  
 .  
 Report  
 •  
**Anthony Marvin**2 years ago  
 I live on island and I constantly watch as locations I went to as a kid being turned into resorts or theist hot spots. it's sad because it's slowly pushing out the locals and removing areas that we can bring our own children

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 Report  
 •  
**Brittney Kainoa**2 years ago  
 This should not happen

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 Report  
 •  
**J Mulloy**2 years ago  
 You want to live in a places that has tourists, but you don't want to live in a tourist town.

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 Report  
 •  
**Barbara Underwood**2 years ago  
 Many reasons!!!! Don't build this!!

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 Report  
 •  
**Leinaala Gonsales**2 years ago  
 Hawaii belongs to the natives.

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 Report  
 •  
**Tiare Makaio**2 years ago  
 I don't want this turned into a resort.

0  
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 Report  
 •  
**Paula Williams**2 years ago  
 Native Hawaiian sites must be preserved.

0  
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 Report  
 •  
**Lawrence Mangauil**2 years ago  
 I was born and raised here in Kona from baby time we need place to eat go play and be free from all Buildings 盖盖盖

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Report

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[Margaret Parsons](#)2 years ago

Resorts are the antithesis of everything I love about the Big Island.

2

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Report

Report

- 

[Taylor Bear](#)2 years ago

fuck the gentrification of our A'ina

2

- 

Report

- 

[Tevita Lavaka](#)2 years ago

It's been a an amazing outlet for youth to stay out of trouble, stay fit, and have fun. I've had some amazing memories there and it would be a shame to lose such an amazing place near to me.

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Report

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[Ashli-Niko L Alley](#)2 years ago

This is my home.

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Report

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[Nick Correa](#)2 years ago

Keauhou is a local hang out not a tourist attraction. Too many favorite local beaches are getting turned into this and it needs to fuckin stop.

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Report

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[Desialee Cabalar](#)2 years ago

All of the local spots are being blocked off by gates or homes with gated communities. This is not fair the local who were born and raised here should not be locked out of their own land just because greed and money. We have something the rich want until they fully pollute and destroy it and then they no longer want it. Hawaii/ Big Island is known to a lot of tourist as the relaxing island. I do not have a problem with tourist but when you buy here on this island as a vacation home now your crowding the island so eventually it will be like Oahu where no one really thinks of it as a vacation spot. Just come stay the week and go home. We have many many hotels and condos that can't be full all year round. Support those places that are already built.

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Report

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[Lisa Suttles](#)2 years ago

Kahona is paradise and should stay as such

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Report

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[James Ellis](#)2 years ago

The big island is getting crowded enough with another resort.

0

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Report

- [Laurie Decasa](#) 2 years ago  
Stop!!

0

Report

- [Martaina Gloor](#) 2 years ago  
We don't need another resort!

0

Report

- [Sandy Jilton](#) 2 years ago  
I was a resident on Hawaii Island for 12 years. I honor the history of this historic place and the natural beauty that only it can offer. The tourism industry will destroy this area if more accommodations are constructed. Honor this place.

0

Report

- [Kelly Sorenson](#) 2 years ago  
I lived there and I care.

0

Report

Report

- [Sean Dooley](#) 2 years ago  
There are enough beach resorts.. where can the residents go when they all become resorts.

0

Report

- [Renee Shove](#) 2 years ago  
This would make me so very sad. Why do rich people feel like they need to take everything away from us and give it to the tourists?? What a shame.

0

Report

- [Daven Haalitic](#) 2 years ago  
This is my home and I don't know why you would touch an area that's been fine since forever.

0

Report

- [Malle Zablan](#) 2 years ago  
Strictly against! Thank you, Malle Zablan

0

Report

- [Laurie Teitelbaum](#)2 years ago  
I love the place to congratulate with friends. I feel that we need to keep it available for all of hawaiian residents to congregate. Please keep it for our children.  
**Report**
- [Kaulahoolai Pilago](#)2 years ago  
The resort on Keahou point is way more than enough. The entire Aii drive is hotels, resorts, condos, vacation rentals, and multimillion dollar properties. Why must our community always conform to the greedy desires for people to exploit Hawaii. When you build stuff like this, the area that we all grew up in and have cherished memories in turns into a sad perversion of what it once was.  
**Report**
- [Cindy Holton](#)2 years ago  
Maintain local traditions and protect waterfront beaches.  
**Report**
- [Julie Steinbach](#)2 years ago  
I love this island because it's not over crowded and all resorts. We love it the way it is.  
**Report**
- [Ana Tuppein](#)2 years ago  
The ocean is a sacred place, especially keahou bay. The increase of tourism in that area will be detrimental to marine life, especially the manta rays that reside in that area.  
**Report**
- [Jasmin McCracken](#)2 years ago  
Just wrong... no, please don't pave paradise to put up a parking lot. There is PLENTY of places for tourists to stay already. Too many.

- [Lori Watson](#)2 years ago  
Save the historical areas before it's gone.  
**Report**
- [GinnyJo Minamishin](#)2 years ago  
This is King Kamehameha the third birth place and hold significant historical and sacred mana to the island of Hawaii. There is no more need to take and replace what is already there !!! This piece of Hawaii, that still is used by keahou canoe club and an area for little family gathering, such as Picnics and paddle boarding. Not to mention the boat ramp for fisherman and fishing grounds around the area. This place is well taken care of by the locals of the big island and hold significant Hawaiian history!!! We don't need any more hotels, condos, homes on this beach front property. It is a respectable play ground for our children and adults as well from land to water. Please save hawaii and our sacred land and history from being over built for greed and control.

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 Report

•  
[Ellie Tyler](#) 2 years ago  
 Keep Hawaii the way it is!

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 Report

•  
[Matthew Kerr](#) 2 years ago  
[Why ruin a good thing?](#)

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 Report

•  
[Vickie Pruitt](#) 2 years ago  
 We already have way too many resorts on this island. This island will end up just like the rest, overcrowded with tourists.

0  
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 Report

•  
[Paul Dagdag](#) 2 years ago  
 30+ resident of the Kealahou/Keauhou ahupua'a and have witnessed the influx of traffic on both Alii and Hwy 19 roads. Adding another resort will only add more congestion to a problem of poor infrastructure.

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 Report

•  
[Rochelle Morais](#) 2 years ago  
 This is a beautiful bay that should be protected and not be overrun by a resort

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 Report

•  
[Stephen Dossey](#) 2 years ago  
 Aloha aina keep Kona country

0  
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 Report

•  
[Kimberly Keikina](#) 2 years ago  
 We don't need another resort!

0  
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 Report

•  
[cathy costa](#) 2 years ago  
 This is our history and culture No desecration

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Report

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**Edwin Gaspar**2 years ago

The area is Historical we dont need any more hotels let alone more people moving here and squeezing out local people native to Hawaii.

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Report

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**Katie Lynn**2 years ago

Keauhou Bay is a precious and sacred place. It deserves to stay that way. The focus should be on housing solutions for residents (in appropriate areas) and land stewardship. Not more resorts destroying the natural and historical sites.

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Report

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**Brooke Morrow**2 years ago

No more building

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Report

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**Luis Pagan**2 years ago

Kolohe

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Report

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**braxston bailey**2 years ago

Stop the Building!

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Report

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**Paul Dagdag**2 years ago

The place is already crowded. We need better roads and alternative routes before more development is built.

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Report

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**Paula Goleta**2 years ago

I'm an outrigger paddler and enjoy the sport. This club lent us canoes to race in Hawaii.

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Report

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**Michele Vinz**2 years ago

We need to preserve more land on the islands.

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Report

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[Alexis MacLeod](#) 2 years ago

I'm signing because there are not enough unspoiled places left in the world.

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Report

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[Alex Dullam](#) 2 years ago

I play volleyball down here on the weekends and I don't want to lose something that makes me happy.

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Report

•

[Kandice Kato](#) 2 years ago

I love Hawaii. not developing every square inch

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Report

•

[Katie McKillop](#) 2 years ago

Please keep Keauhou just as it is. This is a historical area that needs to be kept natural with care. Aloha.

0

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Report

•

[Maite Silva](#) 2 years ago

This place is an amazing place that we love and don't want it gone

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Report

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[Mystery-Lynn Freitas](#) 2 years ago

Hawaii needs more HOUSING for Hawaiians before we desecrate more land to serve tourists who don't live here. We need to preserve the land and beach space and act as stewards of the land - not pave over paradise and put up more parking lots.

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Report

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[Kylee-Anne Kihe](#) 2 years ago

I'm signing because we have so much resorts! Not only do we have so much resorts but there is so much history behind keahou and putting a resort there would just defeat the purpose of why keahou bay is there and why it's so important

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Report

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[Marquesa Calderon](#) 2 years ago

Respect the locals!!

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Report

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Report

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**Teddy Alejandro** 2 years ago

[Stop corporations.](#)

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Report

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**Rachel Curnel Struempf** 2 years ago

[Save our beach! Please don't develop it!](#)

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Report

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**Joseph Jardin** 2 years ago

[I've paddle there for so long you can't just take that down](#)

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Report

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**Lakin Ferris** 2 years ago

[We don't need another resort on this island. That's a significant tourist and local spot where plenty people go to have fun. Putting a resort there would ruin it.](#)

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Report

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**Gabrielle Provencher** 2 years ago

[This is a sacred place for the Hawaiian people that should be left alone and not developed.](#)

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Report

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**David Locke** 2 years ago

[Enuf! Don't turn this place into a Joni Mitchell song.](#)

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Report

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**Jordan Bever** 2 years ago

[Resorts are gross](#)

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Report

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**Heather Harvey** 2 years ago

[This is my favorite local spot to still swim, boat, and surf. If we over populate it, it will kill off the local wildlife and human life. Please stop killing the coral, and livelhood. It's the first place I ever played volleyball on the island. Its where I go to meditate and swim in clean water. Away from the tourist ...](#)

5

Share

Tweet

-

**Robin Akau**2 years ago

I believe there should be recreational spaces in our community.

1

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Report

•

**Carolina Medina**2 years ago

Please sign...When is enough going to be ENOUGH!??若

1

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Report

•

**Aka 002** years ago

I love this court! would be a shame to get rid of it....one of the very few nice beach courts on the kona side..

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Report

•

**Aaron Lanuza**2 years ago

This is a wonderful space for volleyball and beach time with my family

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Report

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**Jasper Felipe**2 years ago

**volleyball**

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Report

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**LaVerne Curry**2 years ago

We have enough developments. We need places for our local residents to gather and enjoy our Aina. We need to keep the volleyball courts and the canoe hale for locals.

1

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Report

•

**Elisha Vierra**2 years ago

I want to keep keaunou bay the way it is and all it's artifacts

1

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Report

•

**Matthew Idom**2 years ago

There's no need for a resort...it's only greed.

1

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Report

•

**Frida Marie**2 years ago

I NEED TO AND THAT'S NOT OKAY TO DO!

1 .  
Report  
•  
**Ann nichols**2 years ago  
This is a terrible idea for this historic area creating traffic, congestion and ruining community character. Owner at Kanaloa at Kona.

0 .  
Report  
•  
**Francis Hogue**2 years ago  
Historical!! Leave it alone

1 .  
Report  
•  
**Vivianmalia Faagata**2 years ago  
Ancestral connection

1 .  
Report  
•  
**Beverly Connelly**2 years ago  
I've experienced this sacred park & beach and see the history and benefit of it being easily available for locals and visitors alike. Over developing is a fine line and a new proposal of additional resort dwellings would be a tipping point for preserving access to this space. Please consider this pocket to be important enough to protect

1 .  
Report  
•  
**Evan Curry**2 years ago  
I have lived here all my life we can not let our island get over run with this kind of stuff. How about tear down the condos and build more volleyball courts

1 .  
Report  
•  
**Davin Long**2 years ago  
I really don't want it to go I love the volleyball court and another resort hell nah!

2 .  
Report  
•  
**Teah Van Bergen**2 years ago  
This land belongs to the people

1 .  
Report  
•  
**Linda Mutch**2 years ago  
Appalling plan for this land. We have more than enough resort developments. Please show respect and keep Keauhou Bay sacred and peaceful.

1 . Report

•

**ANTHONY RODRIGUES**2 years ago

These are luxury condos. A bungalow is a single level unit. Why don't they build it at the former Keauhou Beach Hotel? Or Kona Lagoon. No major development should be allowed till the Aiihi Highway is installed.

0 . Report

•

**Janie Workman**2 years ago

Keeping ancient Hawaiian culture is important!

1 . Report

•

**Linda` Ronske**2 years ago

Save this beautiful historic site. Build your bungalows somewhere else. This public site will then become off limits to everyone but the rich living there.

0 . Report

•

**Deni Altev**2 years ago

This is a sacred area and not big enough for more tourism. Respect the Āina and the folks living here. A'ole development!

1 . Report

•

**Mary E Wilson**2 years ago

Development of these beautiful bays and coastlines has to stop! It's ruining the ecosystems of the ocean

2 . Report

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**Leslie Rae Schmitz**2 years ago

This development is completely unnecessary and will do no good only harm. The existing hotel Outrigger sits half empty and the Keauhou Shopping center commercial space is mostly vacant. The traffic corridor will be hugely disruptive. This cannot be built.

1 . Report

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**Trina Alapai**2 years ago

Enough is enough!!! Listen to the Hawaiian people and do right by them. Respect. 🙏 -

2 . Report

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**Dartene Dabbling**2 years ago

Please keep Keauhou Bay the way it is. PLEASE PRESERVE. Please respect Hawaii and not give to greedy people who care not about us.

0  
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 Report

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**Jeanne Roberts**2 years ago  
 Kam Schools Capital has a monopoly on bays and access in Keaouhou and a pattern of taking away access from the community. Look at what they have done to Heeia Bay!

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 Report

•  
**Deby Quandt**2 years ago  
 Another resort is not needed, this peaceful place is needed.

0  
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 Report

•  
**Susie Cysewski**2 years ago  
 That area needs to stay natural. Enough condos and shops already in Keaouhou. Use the money to help Naive Hawaiians build homes.

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 Report

•  
**Deborah Heun**2 years ago  
 We have enough big resorts don't take away another bay

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 Report

•  
**Diane Neuman**2 years ago  
 This is outrageous. There are plenty of resorts already.

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 Report

•  
**Jeanne Alford**2 years ago  
 We need to protect and embrace these sacred, neighborhood places and not allow big money and commercial developments to come in and destroy them.

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 Report

•  
**Makenani Kaaug**2 years ago  
 Enough development for visitors use.

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 Report

•  
**gretel pate**2 years ago  
 This is sacred land. Get yer paws off it!

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Report

- [Christine Tucci](#)2 years ago  
We vacation there

0

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Report

- [Patti Donohue](#)2 years ago  
I want to save this area from further development.

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Report

- [Sheila Braithwaite](#)2 years ago  
Because I have lived on a barrier island that was ridiculously over built causing all kinds of traffic issues and environmental trauma to the National Park, it abutted. Spaces like this are so important for residents and guests. Celebrate it....don't destroy it.

0

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Report

- [Pamela Weiden](#)2 years ago  
There is already an Outrigger Resort there. It needs renovation and reopening of its restaurant venues - that's plenty for that small little bay.

1

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Report

- [siobhan radway](#)2 years ago  
WTF!

0

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Report

- [Sabrauna Hedenberg](#)2 years ago  
KEEP HAWAII IN HAWAIIAN HANDS

5

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Report

- [Caleb Hoffman](#)2 years ago  
Keep Hawaii's natural beauty!

1

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Report

- [Rhys Ward](#)2 years ago  
I grew up there and don't want to see it change in a negative way.

0

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Report

**Thomas Pinkert**2 years ago

Let's get more affordable housing for local people instead.

1

Report

•

**Eliza Wille**2 years ago

This area does not have the infrastructure to support more development and run off into the bay will further compromise the reef and water quality.

2

Report

•

**Esther Quam**2 years ago

This bay needs to be left just the way it is. It's one of our only playing grounds left for the local people and our keikis to enjoyed without all the mainland humbug, and crowds.. There going to destroy the ocean. Leave it be!!!!

1

Report

•

**Debbie Hecht**2 years ago

Keep Keahou Bay accessible. The cess pools along the north side need to be replaced by sewers.

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Report

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•

**Austin Llanes**2 years ago

To much buildings

1

Report

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**Sarah Kamanu**2 years ago

Keahou bay already has a perfect balance of visitors and locals. There is no space for yet another resort of any kind to be built! The harbor is small, it is already maxed out on tourists, boats and humans

6

Report

•

**Janis Prinslow**2 years ago

I'm signing because there aren't any places left on the Kona side of the island that aren't overcrowded!

0

Report

•

**Janis Prinslow**2 years ago

I'm signing because nobody should be developing on a bay front with waters rising, and no place else to go that's not overcrowded!

0

Report

•

**Barbara Celetto**2 years ago

The Keahou Bay Area is a favorite area for locals and has been for years. The many activities that occur regularly begin and end there. Making unneeded changes would spoil its existence, not to mention robbing those who continue to honor Hawaiian legacy.

9

Report

**Asha Keady**2 years ago

I want to preserve the beauty and history for all

0

Report

**Joshua Pickering**2 years ago

Keep Keahou Bay natural!

0

Report

**Valerie Vaughan**2 years ago

Not every beautiful bay needs a resort. ❤️

1

Report

**Deeson patterson**2 years ago

78

It's good

0

Report

**Tyler Wood**2 years ago

My brother and I grew up there. I still come back when I go see my family. It's been through (and is going through) enough tourist abuse. Leave it be.

0

Report

**Kathy Roney**2 years ago

In my lifetime, I've witnessed Oahu go from a peaceful tropical oasis to an overpopulated tourist site. Allowing this development will take away why many of us chose to live on Hawaii Island and at Keahou Bay. We don't always need to cater to the tourist and greed. Malama `Aina!

8

Report

**Sally Rankin**2 years ago

When is enough, enough!?! Kamehameha Schools claims to be ashamed of how they have managed the `Aina at the bay, but this plan clearly proves they have no shame when it comes to properties they consider financially underachieving, no matter the cost.

4

Report

79

[nathan\\_percifield](#) 2 years ago

[Keauhou Bay](#) is sacred

1

Share

Tweet

Report

•

[Bryan Gazau](#) 2 years ago

Less is more, keep the beaches cleaner, save water, sacred beaches, keep sacred

2

Share

Tweet

Report

•

[sharon\\_willeford](#) 2 years ago

A sacred place for the local people!!! Don't OverDevelop Kona !!!!

5

Share

Tweet

Report

•

[Jacque Green](#) 2 years ago

I am handicapped and elderly... I can't get in the water where there is waves. This is one of the few places

I can go! 

5

Share

Tweet

Report

•

[Erin Hamar](#) 2 years ago

My brother's and grandmother's ashes are in this bay. I go here to be with them... If they build a resort here how can I? Plus I paddled for Keauhou canoe club. Where will they paddle? I am strongly against this! No no no!!!!

7

Share

Tweet

Report

•

[Mike Dennis](#) 2 years ago

I love Keauhou Bay and raised my kids there. I have paddled there for almost 30 years. It's a treasure.

1

Share

Tweet

Report

•

1 comment was added to the list

[Amanda Nixon](#) 2 years ago

Keauhou does not need and cannot handle more condos or resorts. No no to more development on our already fragile over crowded coast.

Here is another petition that has 444 signatures (grows daily with more signatures and comments) as of Aug. 5<sup>th</sup> and it speaks about Big Island resources. It proves that the Big Island DOES NOT have the resources for another Big Resort Development.

Petition Link: <https://www.change.org/p/help-prioritize-big-island-developments-to-keep-island-resources-safe-for-all>

**Petition: Help Prioritize Big Island Developments to Keep Island's Resources Safe for ALL**

We stand to keep The Big Island in a place where the island's resources and infrastructure are safe for the entire population and visitors.

We stand and say homes for locals should MATTER more than mass vacation rentals.

If a home has multiple dwellings, we ask that one could be a vacation rental and the rest should be housing for locals. Local housing needs to come before vacation rentals.

This is an island and it would help the island to have a building stipulation in where the developer has to sell a high percentage to Hawaiians, and locals who have lived here for many years, to help keep the increase in population at a reasonable rate for the island's resources and infrastructure.

We ask that you read all articles below about Big Island resources and learn that the island's resources are limited and are already being affected negatively.

All the development that has already been built, and the many years of new development that has been approved for the future, will affect the island's resources, and we ask that you STOP and look at Big Island resource to make sure that the island has the needed resources for all the development that has been built and the approved development that will be built in the future, before approving even more developments, for the safety of all who live here and visit here.

We stand and ask that you stop before approving more and more developments and learn what is happening to the island's resources and what will happen to the island's resources after the years of development that is already scheduled for the future.

Because the island's resources are being severely impacted as of today.

What will future development do to the island's resources if there are already resource issues happening today?

Please, learn how to take island resources seriously because you have approved many more years of development to come and today the island's resources are having issues.

What will the future look like if you keep approving more developments and don't start look and taking the island's resources seriously?

Read the articles below to learn what is happening to Big Island Resources

1) Hawaii Deals with Burgeoning Waste Management Problem  
As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that

are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste  
Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 the future of the landfill

The West Hawai'i Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables->

5) "The overwhelming plastic waste Hawaii visitors leave behind  
By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A county commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawai'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawai'i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca-bbi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawai'i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawai'i Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "BIG ISLAND NEWS HECO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi' Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawai'i Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawai'i State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST

\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of

generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) "LOCAL NEWS

HECO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night."

<https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawai'i's water supply Hawai'i Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawai'i Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawai'i's power system from its water system, said Kawika Uyehara, deputy director of Hawai'i County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) U.S. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "we're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) NewsHawai'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawai'i Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai%CA%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

20) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_serious\\_large/?rtd=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_serious_large/?rtd=52660)

21) "NewsHawaiian Electric asking Big Island customers to conserve power due to down generators March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

The articles above show that Big Island resources are currently being negatively affected from the development on island, and there are years of new development that has already been approved, and even more development is still being approved before learning if the island's resources can handle more development.

This needs to STOP, and island resources need to be addressed and taken seriously.

We stand to say LEARN WHAT IS HAPPENING TO THE ISLAND'S RESOURCES before approving more development because this is an island, and if there is not enough resources for the developments that are here now, how will there be enough resources for the developments you have approved for the future?

If the island doesn't have enough resources for the developments as of now, there won't be enough resources for developments that have not been approved as of yet, and we ask that you say NO to ALL future developments until you FULLY understand that the island's resources can accommodate future developments.

We stand and say that Big Island resources needs to be FULLY considered before any more new development is approved for the safety of ALL who live here and visit.

There are many, many developments that have been approved for years to come and we stand and say we need to learn how the island's resources will be affected when these developments are finished before you keep approving more and more developments!

We stand and say NO DEVELOPING ON BURIAL GROUND. The history of the island needs to be preserved and the burial grounds need to be respected at all costs.

We stand and ask to make it mandatory for vacation rentals and ALL resorts and hotels to provide drinking water machines to their guests to help stop all the empty water bottle waste on the island.

We stand and ask to make it mandatory for vacation rentals and ALL resorts and hotels to provide shampoo, conditioner, body wash in bulk containers rather than continuously using small, different containers for every new guest, to help stop all the empty bottles waste in the limited landfill.

We ask for an Environmental Impact Report to be done to learn what is safe for Big Island resources with future developments and the population that live here now and will move here in the future.

How can we be sure to have enough landfill, water, sewer, power...for everyone? This needs to be learned.

Also, there are mostly only 2 lanes throughout the entire Big Island and some places where cars cannot pull over if an ambulance needs to get by.

The traffic has seriously increased and if the island's population keeps increasing there will be hours and hours of constant serious traffic in the near future, how will ambulances get by in emergencies?

What if there is a tsunami and people need to get to higher ground? Will they be able to get to higher ground in a safe time without the infrastructure to accommodate the increase in population?

We stand and ask that you start increasing the infrastructure to accommodate the traffic before you approve more developments.

The island's small road infrastructure isn't made for a high population and that needs to be taken seriously.

We ask for another hospital to be built, as well as a trauma center and dive chamber to be put on the island to accommodate all types of injuries because of all the years of new future development that you have already approved, these buildings will be needed.

Alii Drive is only two lanes and right now there are three huge developments in progress, and over 10 more acres of land on this street has just been approved for even more development on this street.

Did you research to learn how this one road can handle more development before your approval?

Did you research and check on the island's resources before you approved this and many other developments all over the Big Island?

We stand to say, stop development to learn how roads will handle all the new homes that you have already approved for years to come before more development is approved because right now there is serious traffic issues all over Big Island?

We stand to say what are you doing about the growth in homeless on the island? We stand and ask that this be taken seriously.

What about parking?

All of the Big Island towns have parking issues, especially during high tourist seasons and especially Ironman.

The land at the bottom of Henery St. has been for sale for a new resort for years and the town needs parking. Would it be possible to use that land for town parking instead of another resort?

With more subdivisions comes more cars and the island towns are already overcrowded with parking issues. How will parking improve with more houses? Is the Hawaii Planning Department considering the parking issues?

There is vacant land next to Lavern's in Kona town, can you build a parking lot there?

We stand and ask for you to find a way to improve the parking issues before approving more development because parking and traffic are increasing.

There are over 50,000 cesspools on The Big Island. We stand to say that all cesspools be upgraded or converted into a toilet such as the one below ASAP, to stop waste water pollutin in the ocean around the island.

Please, give Tax breaks to all those who change from a cesspool to a toilet such as the Cinderella Cinder <https://cinderellaeco.com/en-us> this does not use water and is a way to get rid of cesspools so they stop polluting the ocean that we all swim in today.

If you agree with this info, please sign this petition.

There are many new homes that have been approved for future development and are currently being built right now and today, the island has many resources issues before these developments are complete.

This petition states that we strongly OPPOSE approving new development applications because the island's resources are currently having serious issues, as you can see from the articles above, and many more homes have already been approved for future years of developments.

You need to learn how island resources will be affected by these years of future developments before approving more developments.

There are many big black and white signs on vacant lands that have development application information and Tax Map Key numbers for new developments and they are all over the island. What will the island become if you don't start taking island resources seriously?

The safety of all our lives is in your hands. Please, take that seriously!

Thank you for your support!

**Please read these comments because these comments and signatures MATTER AND DESERVE TO BE ACKNOWLEDGED BECAUSE THEY ARE THE HAWAIIAN PEOPLE, LOCALS AND TOURISTS!**

**Reasons for signing the above petition**

See why other supporters are signing, why this petition is important to them, and share your reason for signing (this will mean a lot to the starter of the petition).

• [Kristina Libbey](#) 1 week ago

If the island is not protected, there will be no island. Respect the land. Respect the people.

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• Report

• [Francesca LAFONTAINE-CÔTÉ](#) 2 weeks ago

For me it is so important to protect the nature and the biodiversity of Hawaii. There is enough tourism and enough accommodations for tourists and the priority should be to preserve and protect the marine life and environment, not to make money! Animals were there first and they must be respected and preserved.

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• Report

• [Jennifer Lund](#) 2 weeks ago

Environmental Impact: Pollution Risk; Developments pollute nearby waters both during and after construction. Endangered Species: Habitat for federally protected green sea turtles and endangered monk seals. Development will threaten these species due to pollution and human disturbance. Golf Course Runoff: Golf course pesticides and fertilizers lead to harmful algae blooms, killing coral and marine life. The removal of the trees that act as a natural filter will allow golf course runoff to pollute the Bay. Increased Human Activity: More tourists and residents will increase noise, water, and light pollution, further disturbing marine life. Motor Vehicle Pollution: Increased traffic from the resort will lead to more oil and heavy metal runoff into the bay. Noise Pollution: Construction and increased human activity will disrupt marine life, particularly cetaceans. Stormwater Runoff: Development will increase impervious surfaces, leading to higher stormwater runoff and pollution. Sea Foam Toxins: Pollutants in runoff can lead to toxic sea foam, affecting air quality and marine health. Scientific Evidence: NOAA & Other Studies: Developments have always polluted coastal waters, harming marine ecosystems. Coral Reefs: Runoff from developments causes coral bleaching and death, as evidenced in Hawaii and other coastal areas. Plankton Decline: Pollutants from runoff kill plankton, crucial for manta rays' diet, leading to ecosystem collapse. Algae Blooms: Pollution runoff causes algae blooms, smothering coral reefs and

killing marine life. Ecosystem Research: Studies show significant negative impacts on marine ecosystems from development-related runoff. Legal Concerns: Endangered Species Act: Development violates the act's mandate to conserve habitats for endangered species. Hawaii Conservation Laws: Local statutes require conservation of indigenous aquatic life and their ecosystems. Conservation Mandate: Federal and state laws emphasize conserving ecosystems that support endangered species. Infrastructure Issues: Resource Strain: Big Island already faces water shortages, limited landfill capacity, and power conservation needs. Inadequate Infrastructure: Existing infrastructure cannot support additional strain from a large resort development. Waste Management: Big Island's landfill is nearing capacity, and new developments will exacerbate waste issues. Water Crisis: Ongoing drought and water contamination issues make additional strain from new developments unsustainable. Power Conservation: Big Island is currently experiencing power shortages and rolling blackouts, and new developments will increase demand. Case Studies: Chesapeake Bay: Coastal developments cause significant harm due to runoff, a situation Keauhou Bay could face. Hawaiian Islands: Existing research shows developments lead to severe degradation of coral reefs and marine life. Global Examples: Similar coastal developments worldwide have resulted in long-term environmental damage. Community Impact: Local Use: Keauhou Bay is a popular spot for local activities such as boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. Tourist Impact: Increased tourist activity will further degrade natural resources and disturb local wildlife. Economic Considerations: Tourism Dependence: Manta ray tours and other eco-tourism activities depend on a healthy marine environment. Local Economy: Damage to the bay's ecosystem will negatively affect local businesses reliant on marine tourism. Long-Term Costs: Environmental degradation will lead to long-term economic costs, outweighing short-term development gains. Conclusion: Long-Term Impact: Allowing the bungalow resort will permanently alter and likely destroy Keauhou Bay's ecosystem. Conservation Priority: Emphasis on conserving the bay as a natural habitat for endangered species and marine life. Community Responsibility: Urge decision-makers to consider the long-term environmental, economic, and community impacts before approving the development

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Report

**Alexis Stubbs** 2 weeks ago

I'm not opposed to development, but I AM adamantly opposed to irresponsible development that neglects community input, resources, and access. I strongly opposed development that exploits what's left of our natural resources and Shorelines for the sake of profit. Too much already. Enough is enough. No more.

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Report

**mark isomura** 1 month ago

Keep Kona country NO MORE STOLEN LANDS

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Report

**KATHI BALBI** 1 month ago

Hospitals need to be updated first. Fix what you have before you build any more new construction.

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Report

**melissa Sobkowitz** 1 month ago

We need to work on the current infrastructure prior to more development.

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Report

**Marcy O'Malley** 1 month ago

Enough is enough! The County needs to deal with its neglected infrastructure before allowing anymore "Resorts"

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Report

**Pali MENCH**1 month ago

No development until adequate infrastructure. Roads, water, electric, sewer, schools. All of these are already overburdened.

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Report

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**Carolann Cash**2 months ago

Getting dangerous as more and more folks moving here. Plus all the proposed developments. Give us a break

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Report

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**Timothy Sullivan**2 months ago

Keep Hawaii Hawaiian

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Report

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**Ferol Kolons**4 months ago

I'm tired of all this development with no infrastructure. I spend so much time stuck in traffic and it's raining my life in Hawaii. I can't imagine being stuck in an ambulance that is stuck in traffic. People will die and then they'll sue the state. Infrastructure before construction!

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Report

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**Justin Porter**1 year ago

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**Amy Lee**5 months ago

The beauty and historical values are very significant. Sea turtles will loose their homes and/or become endangered. It's time to put a stop to the greedy people developing the land. What else must we endure?

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Report

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**Fatima Ayoubi**1 year ago

It's important to preserve local lifestyle

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Report

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**Caroline Norcross**1 year ago

Hawaiian lands as not just for tourists and the rich.

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Report

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**Andrea Kania**1 year ago

The land should not be destroyed. Focus on locals being able to afford housing. Stop the greed.

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Report

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Needs to be a halt on wealthy mainlanders rushing the B.I., driving up house pricing. Many of these people don't even live here FULL-TIME.

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Report

[Linda Johns](#) 1 year ago

There are too many homeless locals

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Report

[Joanne A Martinez](#) 2 years ago

Big Island residents are impacted by all the high end development promoted by real estate business, the planning department and Mayor driving the high cost to live on the island beyond affordability. Native Hawaiians r forced to leave their homeland replaced by wealthy mainlanders changing Native Hawaiian & local culture to include political views not favorable to long-established residents on Big Island. Hawaii County is becoming not much different than stateside culture. We are losing our uniqueness & delicate ecostructure is being damaged.

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Report

[Lauren Kamauu](#) 2 years ago

We need to be able to live here too! We shouldn't be priced out of our homes

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Report

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[Susan Collins](#) 2 years ago

Local families are priced out of housing market.

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Report

[Annette Reyes](#) 2 years ago

The laws should be that any residential property that is sold in Hawaii, must be sold to other residents that have lived here as full time residents for 5 consecutive years or more, immediately before the actual buying of the residence. Proof must be submitted including 5 years or more of their income taxes filed in Hawaii as full time residents.

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Report

[Pam Shultise](#) 2 years ago

We need affordable housing!

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Report

[Jana Serion](#) 2 years ago

Jana Serion

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Report

• **Kurt Faut2 years ago**  
Simply put, the traffic on Kamehameha III Road, should this project be completed, will be similar to that fronting Hulihe'e Palace and the pier. Tourists clamoring to swim and recreate on the bay, ride on the snorkel and fishing boats, and passing through to the Outrigger Keauhou Bay Hotel will irreversibly and negatively affect the peaceful nature of this gem of an ocean masterpiece. I am firmly against the construction of the through road from Ali'i Drive to the Hotel.

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• **Report**  
• **Ana Chervenak2 years ago**  
My home is becoming over populated

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• **Report**  
• **CM Simon2 years ago**  
I care.

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• **Report**  
• **Tracy Gonsalves2 years ago**  
We are already overpopulated, our ecosystem is altered each time portions of this land is cleared to make way for another structure or roadway, this invites the outsiders of wealth to buy and continues to suppress locals and natives from living a basic or simple affordable life. This depletes and disrupts our beautiful historical hawai'i nei.

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• **Report**  
• **Frank Rom2 years ago**  
Seems population growth is outpacing infrastructure development by too big a margin.

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• **Report**  
• **Ann Eshabarr2 years ago**  
We need to build smart and affordable. We need to take great care with the important decisions being made. Infrastructure, roads, culturally significant land, and traffic are just a few of the things to consider. We need to move forward carefully. We must stop corruption. All money should go to where it's intended not someone's pocket. We need more auditing. Mahalo.

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• **Report**  
• **Peter Matlock2 years ago**  
If all existing homes that are supposed to be hooked up to our sewer system were connected overnight, we'd already be over the capacity of the Keakehe sewage treatment plant. We know the danger of getting into local waters with an open cut--infections take impossibly long to heal. Coral reefs and marine wildlife are suffering. Why are we making this problem worse?

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• **Report**  
• **Protect 'Opihihale Ohana2 years ago**

Ua mau ke'ea o ka 'āina i ka pono.

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Report

• Heidi Lee2 years ago

We don't need more housing unless we have enough natural resources... and we need affordable housing not more second homes for people

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Report

• Ethan Olins2 years ago

As it is there's not nearly enough infrastructure or decent shoreline access in Kona and BI in general. Aole.

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Report

• Duane Nakano2 years ago

We need more affordable housing for locals...I'm in the construction industry & all I see is lots being cleared to build for outsiders.

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Report

• Carolyn Witcover2 years ago

98

There is too much housing here owned by people who only live here for a few months each year! Meanwhile the locals suffer.

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Report

• Karen Foster2 years ago

We already need infrastructure improvements.

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Report

• Hanna Casagrande2 years ago

I'm signing because lots of locals family's as well as local family business are being kicked out of there long time generation or just starting businesses, and family can't afford to live in there own home in which they were planning on staying in forever to raise there kid let there kids raise there kids etc... almost everyone is moving out to ocean view because it's the only thing we can afford due to lots being underpaid as an employee, so when can we ever win honestly, it's like we get this but you gotta do this how is that fair? I get we're the biggest island but not every haole has to live here vacationing is enough to make our system run, so please keep in mind to those who want to build and kick all current residents out who have been there for YEARS keep in mind that they have a family to care for and sometimes there's only ONE person who is able to work and provide for the whole entire house....be thoughtful don't ruin our lives and make us all homeless

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Report

• Mark Axelson2 years ago

Markaxelson

99

- 0 .  
Report
  - [bini eastley](#)2 years ago  
[I don't want Kona to become Honolulu](#)
  - 0 .  
Report
  - [Kittrena Morgan](#)2 years ago  
Enough is enough.. Kailua Kona sewage seeping into the ocean for decades.. All homes sold to people flocking in and no own who lives or born here.. one white or blue collar workers can buy a home. I bought a house with a mortgage well over a decade ago and the price for a termite home trashed by tenants was \$250,000. Now can be sold for \$700,000. Bizarre.
  - 0 .  
Report
  - [Lisa J Sims](#)2 years ago  
[Growth in Kona has skyrocketed.. keep Kona a small town or there won't be any natural land left](#)
  - 0 .  
Report
  - [Jan Holton](#)2 years ago  
[I agree with the issues stated in the petition.](#)
  - 0 .
- 1 .  
Report
  - [Aleksie Keske](#)2 years ago  
[Hawaii belongs to Hawaiians NOT real estate agents.](#)
  - 0 .  
Report
  - [Catherine Watson](#)2 years ago  
[To save the big island don't want more people moving here](#)
  - 0 .
- 2 .  
Report
  - 9 comments were added to the list
  - [Denise Smith](#)2 years ago  
[The big island can not handle MORE VEHICLES MORE PEOPLE... WITHOUT PROPER INFRASTRUCTURE!!!!](#)
  - 0 .  
Report
  - [I Vazquez](#)2 years ago  
[I would like Hawaii Island to NOT become like the island of OAHU!](#)

Kamehameha Schools claims they need money and that is why they want to develop Keauhou Bay, but the truth is, they have lands that are ALREADY DEVELOPED that they hardly use, and these lands CAN BE USED TO MAKE MONEY. THEY DON'T NEED TO DEVELOP KEAUHOU BAY!

Please watch this video

<https://www.youtube.com/watch?si=7B8BIBBQd4pxaWek&v=1UtiIWeyLA&feature=youtu.be>

For example, Kahalu'u Beach Park they only use for their Private Events and this land could bring in money through parking fees, day pass use, wedding and birthday function fees, farmers market fees, concert fees to benefit the schools... there are endless amount of ways to make money from these already developed lands.

Kamehameha Schools also has Hale Laau that hasn't been used for years and it is fully developed with a parking lot and structures already on the land. They could use this land to school kids, house Hawaiian elders that need a home, hold weddings and events that they charge fees... but they have just let it sit there for years doing nothing.

Those are only two lands that I know of that are not being used and that are already developed. How many other properties do they have that are not being used and that are already developed?

Who has so much land that they can develop it and let it just sit there doing nothing?

Who has so much land that they can develop a beautiful park and ONLY use it for THEIR PERSONAL AND PRIVATE EVENTS?

Who has so much land that they don't want to offer their already developed lands to make money but rather want to develop a historical bay that is the birthplace of King Kamehameha III and their Bungalow Resort development will KILL the entire ecosystem that is there, by causing SCIENTIFICALLY PROVEN POLLUTION that WILL go into the bay because that is what has been reported happens when development is near water, who is happy to pollute a historical bay, rather than use their already developed lands that are just sitting there not being fully used to make money?

**Kamehameha Schools! SHAMEFUL!!**

The Princess's Will States "**A good education**" was to be the trustees (Kamehameha Schools) "**first and chiefly**" concern. This site shows Hawai'i is 49th with a D+ Overall rating <https://www.alectreportcard.org/state/> and Hawai'i has been on the low end of national ranking for years and is the ONLY state in the country that was given Endowed Land for the Hawaiian people to be "**first and chiefly**" educated.

In The Last Will and Testament of Bernice Pauahi Bishop, Mr. Bishop states, "The improvement of young Hawaiians was an object and desire constantly near to the heart of the founder of the Schools (Princess Bernice Pauahi Bishop)... these schools were provided for, in which Hawaiians have the preference, and which she hoped they would value and take the advantage of as fully as possible..." <https://kaiwikilooumoku.ksbe.edu/article/heritage-center-the-last-will-and-testament-of-bernice-pauahi-bishop>

"The Princess's Will distinctly states that: "To devote a portion of each year's income to the support and education of orphans, and others in indigent circumstances, **GIVING THE PREFERENCE TO PURE OR PART-ABORIGINAL BLOOD**." <https://www.moolelo.com/ks-willbetter2.html>

Report

Deni Alley 2 years ago

[Keep Hawaii's Island country!](#)

3

Share

Tweet

Report

Frederick Smith 2 years ago

[No new development until we update public infrastructure like roads and sewage. It's amazing how far out of control this has gotten already.](#)

Kamehameha Schools are the trustees, and they are legally obligated NOT ONLY BY CULTURAL LAW but also, they are LEGALLY OBLIGATED to do what is BEST for the land and their BENEFICIARIES. THE HAWAIIAN PEOPLE ARE THEIR BENEFICIARIES and thousands of their BENEFICIARIES are OPPOSING this Bungalow Resort Development and these people have a RIGHT TO BE HEARD AND ACKNOWLEDGED BY LAW!

Princess Bernice Pauahi Bishop's Will states, under 4th paragraph down from Thirteen, "I desire my trustees to provide **first and chiefly a good education** in the common English branches, and also instruction in morals and in such useful knowledge as may tend to make good and industrious men and women; and I desire instruction in the higher branches to be subsidiary to the foregoing objects.

**For the purposes aforesaid** I grant unto my said trustees full power to lease or sell any portion of my real estate...not to exceed however one-half of the fund which may come into their hands, in the purchase of suitable premises, the erection of school buildings... expend the annual income in the maintenance of said schools..." <https://www.ksbe.edu/about-us/about-pauahi/will>

Kamehameha Schools is to use the land specifically, "**For the purposes aforesaid**" and that would be education for the Hawaiian people and NOT a DEVELOP a Bungalow Resort for tourists and offer tourists an education in Hawaiian culture. This is stated clearly in Princess Bernice Pauahi Bishop's WILL.

Princess Pauahi Bishop's Will states that the trustees are to use the Endowed land's money to educate Hawaiian people because they are the Princess's Beneficiaries. "I **desire my trustees to provide first and chiefly a good education...** For the purposes aforesaid I grant unto my said trustees full power to lease or sell..." **THIS STATES THE LAND IS TO BE USED TO EDUCATE THE HAWAIIAN PEOPLE, THE PRINCESS'S BENEFICIARIES.**

Supporting and educating these kids is why Princess Bernice Pauahi Bishop created Kamehameha Schools and it states this in her Will that is what was to be the trustees (managers) "First and Chiefly" concerns. It's why they received the Endowed land because the Hawaiian people are the beneficiaries of this land in the Will.

Marissa Harman with Kamehameha Schools told me they plan to give "Full Access" to ALL their Endowed Hawaiian lands to the high-end tourist guests who stay in their bungalow resort they want to develop in Keaouhou Bay, to **educate** these tourists in Hawaiian culture because it's the **perk** they want to offer tourists for staying in their bungalow resort.

They want to educate tourists when **their Beneficiaries** are not receiving a **good education as per the Princess's Will.**

Kamehameha Schools Endowment was valued at 14.7 Billion in 2021 per this [Google Financial](#), and the reason they say they want to develop in Keaouhou Bay is because they **NEED** money and if they **NEED** money, then they **NEED** to start looking at who is managing their money because they have more land than anyone in the world has and they have already developed land than can use starting today to make money!

Princess Bernice Pauahi Bishop wanted education for her people to be "First and Chiefly" the trustees (Kamehameha Schools) responsibility. This is stated very clearly in her Will because she named that the Hawaiian people's were her beneficiaries and they were to receive "a good education" **through the lands she ENDOWED to Kamehameha Schools to use the money to support and educate her beneficiaries, the Hawaiian people's, and NOT educate tourists in a bungalow resort that doesn't need to be developed because there are developed lands they currently have that they CAN use to make money.**

Please reject this EIS because Kamehameha Schools have lands, they can use to make money with starting today if they wanted, because these lands are already developed.

Please reject this EIS because petition **Save Keaouhou Bay From Becoming a Big Crowded Resort** has thousands of Hawaiians and locals who are **OPPOSING** this development. These people **DO NOT WANT THIS DEVELOPMENT AND THEIR VOICES MATTER AND MUST BE ACKNOWLEDGED!**

Please reject this EIS because it is **SCINETIFICALLY PROVEN DEVELOPMENTS POLLUTE NEARBY WATERS and Keaouhou Bay WILL BE POLLUTED** for years to come and the Hawaiian people won't be able to fish, spear fishing, swim, free dive, snorkel, dive... in Keaouhou Bay because it **WILL BE POLLUTED** and in the Cultural Law it states that cultural practices **MUST BE CONSIDERED!**  
<https://kohanaikiohana.org/legal-victories>

Please reject this EIS because Kapuna Kumu Lily Kong states there are burial grounds there on the land Kamehameha Schools wants to clear, and other Hawaiian's have also stated there are bones in the caves there on this land.

Please reject this EIS for cultural reasons as it is stated in many of the comments from both petitions above.

Please reject this EIS because Kamehameha Schools has **NOT ACKNOWLEDGED OR ASKED** thousands of Hawaiians, or Hawaiian Descendants from Keaouhou Bay how they feel about developing this land, Keaouhou Bay. They have asked **ONLY 4 families** (who probably work for them) on an island that has thousands of Hawaiian people and I have presented video testimony from Kupuna Kumu Lily Kong who is a Keaouhou Bay descendant and her and her family **OPPOSE DEVELOPMENT!**  
<https://vimeo.com/994680462>

Please reject this EIS because there are over 6,198 signatures on petition **Save Keaouhou Bay From Becoming a Big Crowded Resort** and 444 signatures on petition **Help Prioritize Big Island Developments to Keep Island's Resources Safe for ALL** as of Aug. 5<sup>th</sup> and **ALL OF THESE SIGNATURES COMPLETELY OPPOSE** this development and many of these voices are the voices of Princess Bernice Pauahi Bishop's Beneficiaries who are the Hawaiian people and they are stating **DO NOT DEVELOP KEAOUHOU BAY!**

[https://www.change.org/p/save-keaouhou-bay-from-becoming-a-big-crowded-resort?utm\\_source=share\\_petition&utm\\_medium=custom\\_url&recruited\\_by\\_id=92a53560-1e91-11e5-b48f-b94e90cebdbd](https://www.change.org/p/save-keaouhou-bay-from-becoming-a-big-crowded-resort?utm_source=share_petition&utm_medium=custom_url&recruited_by_id=92a53560-1e91-11e5-b48f-b94e90cebdbd)

<https://www.change.org/p/help-prioritize-big-island-developments-to-keep-island-s-resources-safe-for-all>

Please reject this EIS because under Princess Bernice Pauahi Bishop's Will it states Kamehameha Schools are her trustees and they have a **"fiduciary duty"** to do what is **best for THEIR BENEFICIARIES (the Hawaiian people's) and a Bungalow Resort is BEST FOR TOURISTS NOT THE HAWAIIAN PEOPLE!**

Please reject this EIS because the Big Island **DOES NOT HAVE THE RESOURCES TO PROVIDE FOR ANOTHER BIG RESORT ON ISLAND** and there are many comments that agree with this fact because of the factual reported articles in the **Help Prioritize Big Island Developments to Keep Island's Resources Safe for ALL** petition <https://www.change.org/p/help-prioritize-big-island-developments-to-keep-island-s-resources-safe-for-all>

Thank you for listening to **ALL OUR VOICES.**

Sincerely,

Rebecca Melendez

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**From:** keahoubay <keahoubay@ksbe.edu>  
**Sent:** Tuesday, August 6, 2024 11:18 AM  
**To:** Rebecca Melendez  
**Subject:** Re: [EXTERNAL] Attention County of Hawai'i Planning Keahou Bay EIS Comment

**Categories:** Yellow Category

Aloha e Rebecca,

Thank you for your comments concerning the Keahou Bay Management Plan, Draft Environmental Impact Statement. Your comments have been received and administratively recorded.

Comments received during the 45-day public comment period will be reproduced in the Final Environmental Impact Statement, and substantive comments addressed.

Since you also provided a copy to the County of Hawai'i and our planning consultant, G70, we will not be forwarding them a duplicate copy.

We appreciate your involvement and contribution to the environmental review process. Your input is invaluable in helping us develop a management plan that reflects the needs and concerns of our community.

Thank you once again for your engagement and commitment to the future of Keahou Bay.

Mahalo,

The Keahou Bay Project Team

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**From:** Rebecca Melendez <[REDACTED]>  
**Sent:** Tuesday, June 25, 2024 1:54 PM  
**To:** KeahouBay@g70.design <KeahouBay@g70.design>; Roy, Alex <Alex.Roy@hawaiicounty.gov>; keahoubay <keahoubay@ksbe.edu>  
**Subject:** [EXTERNAL] Attention County of Hawai'i Planning Keahou Bay EIS Comment

**CAUTION: This email is from an outside sender. Do not click on links or open attachments unless you recognize the sender and know the content is safe.**

Dear County of Hawai'i Planning,  
Please, Do NOT risk polluting the water in Keahou Bay by allowing Kamehameha Shoals to develop their bungalow project, because it is proven that developments will ALWAYS have rain runoff that will pollute the bay constantly during development and after.  
Please, read the Scientific articles below that prove that development ALWAYS pollutes the water in every coastal developed area.  
The coral all over Hawai'i has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keahou Bay will be devastating to the coral, reef

fish, and all Aquatic life there, and even the Manta Rays that go there every night to eat zooplankton from the Manta Ray tours at night, and eat it during the day as well because they need to eat 5 times their body weight in zooplankton daily.  
If you allow this bay to be development you will be allowing all types of marine life to die and there is NO WAY to stop this from happening because runoff water from development can't be stopped. It is what happens in ALL coastal developments.

Please, read these articles that Scientifically Prove this point:  
Reason #1 a Resort Development WILL SeverelyPollute Keahou Bay  
Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawai'i. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide..."

This was the third major bleaching episode in Hawai'i over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off). "<https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20Bleaching%20is%20occurring%20more,had%20catastrophic%20impacts%20state%20wide>."

This article is by the Coral Reef Alliance here in Hawai'i, "An ecosystem under threat  
Hawai'i's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." "<https://coral.org/en/where-we-work/hawaiian-islands#:~:text=Hawai%CA%BBi's%20reefs%20face%20major%20global,into%20Hawai%CA%BBi's%20waterways%20every%20day>."

Reason #2 a Resort Development WILL Kill Marine Life  
The manta rays go to Keahou Bay every night to eat zooplankton and if you allow this development that WILL have runoff water, you WILL be causing zooplankton to be seriously affected because as this article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem... Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain"<https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation>.

Here is a research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakesand oceansserveasinksfor many pollutants. Plankton comprise a large portion of the living

matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation. "[https://scope.doe.carnegiescience.edu/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.doe.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

The above articles show that development of Keaouhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this will cause the manta ray food source to disappear. This will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on this tour to survive.

Here is another article that proves runoff from development in this area will hurt and kill plankton, by **Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon"** The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development."

[https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii."

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The Chesapeake Bay has a foundation that is trying to save it due to runoff pollution that developments create, and the Chesapeake Bay is a lot bigger than Keaouhou Bay. If it's being drastically hurt by runoff water, Keaouhou Bay waters won't stand a chance if development above the bay is allowed because this bay is very small.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow... As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keaouhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay, and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted->

<runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20place%20in%20leopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keaouhou Bay because it is so much smaller than the Chesapeake Bay.

If you allow Keaouhou Bay to be developed there will be a higher population in the bay and that will hurt the coral in the bay as well, because it's known that "Denser coastal populations... will lead to reef degradation by coastal constructions. Denser populations inland will lead to more runoff and situations...

Reason #3 a Resort Development WILL Increased Human Traffic In Keaouhou Bay Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regards to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,fo%20more%20runoff%20and%20siltation.>

This article is by abc NEWS, "This is how tourists are destroying coral reefs in Hawaii The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%20C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20study%20said.>

If you allow this resort to be developed, you will be destroying the coral reefs in the bay because this bay is extremely small and used by a lot of locals already for fishing, canoeing, swimming, snorkeling, paddle boarding, surfing, boating...it can't afford more use by many thousands more people yearly.

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management."

[https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakqGNhaJhJAnWAq453RtRqN0JAiW6l9mR3ZoTv0PvGzA51c\\_H001zrHNIP3ASnhccKRV6\\_vKLPw49dbmBYoXSq3Y1MgQIGBZsapidGUH7O1SLbu9x5P3xED4KxI4T0sJvqQ1a72RzR3tUbraxpodJ62A0NlSmWSuXb7JIEDdpj8OGJpx71TJW6GfXVFKJZYeNdcJ3Sw\\_dnaU695Zlh](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakqGNhaJhJAnWAq453RtRqN0JAiW6l9mR3ZoTv0PvGzA51c_H001zrHNIP3ASnhccKRV6_vKLPw49dbmBYoXSq3Y1MgQIGBZsapidGUH7O1SLbu9x5P3xED4KxI4T0sJvqQ1a72RzR3tUbraxpodJ62A0NlSmWSuXb7JIEDdpj8OGJpx71TJW6GfXVFKJZYeNdcJ3Sw_dnaU695Zlh)

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%20based%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200->

[0#:~:~:~:Coastal%20development%20and%20unoff%20lead,services%20that%20coral%20reefs%20provide.](#)

All developments can't fully stop polluting because of runoff from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral."

[https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20unoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20unoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival"

[https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20unoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20unoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

Reason #4 a Resort Development WILL Increase Traffic

The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side.

Allowing another resort to be developed will bring more cars that will lead to a lot more traffic that the island can not handle, please read the articles below by different NEWS companies that prove this point.

This NEWS article by Hawaii News Now, "Report shows alarming surge in Hawaii island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Please watch their video on their link below because it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists comes more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state, This time last year Hawaii island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks..

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added. <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is the same for Big Island. The traffic problems they talk about are the same issues here on Big Island, and this article also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." <https://www.civilbeat.org/2024/02/angry-over-island-traffic-iams-lets-talk-about-solutions/>

Please, watch the NEWS video from the link below on aerial footage in Hilo because the footage shown is the same thing that is happening on Alii Drive and Queen K HWY, and for the same reasons.

There are 2 developments already on Alii Dr. being built as of today, and more are scheduled for this road in the near future, and Alii Dr. and Queen K HWY are the roads Kamehameha Schools Bungalow Resort will be using if approved and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow already.

The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well.

See the photo below that proves this point in Kona, and here is the NEWS article by KITV NEWS that talks about Hilo and the same thing is happening in Kona on the roads Kamehameha Schools wants to develop their resort, "Hawaii island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-iams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-iams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash on Alii Dr. and when there is an accident on this road, it turns into only one lane that needs a flagger to help direction traffic, and that adds even more traffic to this already seriously congestion road, and Kamehameha Schools wants to add a resort on this road, and that will increase the traffic even more.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FQSnPDii8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Please read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path as well as The Law of the Splintered Paddle below <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

### The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law, "KŪŌ WAI MALAHOE" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless (especially KŪPUNA and KEIKI) across Hawaii be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawaii. After being added back in 1978, the law is part of Hawaii's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

· Caring for and serving one's people

· Knowing and doing what is pono (right)

· Standing for the principle that leadership privilege is earned

Taking kuleana (responsibility) for those we serve  
Doing so with compassion, love, and respect  
"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

**The Law of the Splintered Paddle** is also on Kamehameha Schools website, so they should want to help make Big Island roads become safer and not add to the traffic and possible traffic death toll problem. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-rmq-true-200-years-after-k>

Besides a resort development in Keauhou Bay causing runoff that will severely pollute the bay as the above research and science articles have shown above causing marine life to die, it will also increase in the bay's population that will seriously add to damaging even more coral, plankton and all marine life as well, and the island has severe traffic issues already with increased death tolls rising, and a resort development in Keauhou Bay will totally increase even more traffic in these already severely congested traffic areas.

**Reason #5 The Big Island Doesn't Have the Resources and Infrastructure for Another Resort**  
Please see the articles below because the Big Island doesn't have the resources or infrastructure to safely add another resort development on island and these other NEWS and Research articles prove this point.

1) Hawaii Deals with Burgeoning Waste Management Problem  
As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020  
"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawaii Sanitary Landfill reaching capacity.

The West Hawaii Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges in Dealing With Its Waste  
Hawaii Public Radio Published January 9, 2020 at 5:00 AM HST  
"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE  
HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17, 2022

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumslocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables->

5) "The overwhelming plastic waste Hawaii visitors leave behind  
By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A county commission drafts ordinance aiming to ban recyclables at West Hawaii landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawaii County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawaii Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY  
HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions."

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca-bbi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant  
Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters  
Hawaii Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii Department of Health. <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs Current situation  
There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "BIG ISLAND NEWS HECO restores power after initiating emergency outages on Big Island by: Elizabeth Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island  
February 13, 2024 · 5:23 PM HST

\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators."

<https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

#### 14) "LOCAL NEWS

HECO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night."

<https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST Water departments on O'ahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month. But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawiika Uyehara, deputy director of Hawaii County's Department of Water Supply."

<https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-ohahu-are-asked-to-conserve-water-amid-power-outages>

16) U.S. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "we're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) Newshawaii County issues mandatory 25% water restriction for North Kona

August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawaii Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News

on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawaii, the Hawaii County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-CA%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiieletric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

20) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuat3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_articles/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuat3/hawaiian_electric_is_reporting_that_several_articles/?rdt=52660)

21) "NewsHawaiian Electric asking Big Island customers to conserve power due to down generators March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will damage Keauhou Bay coral and marine life and, Big Island resources and infrastructure are currently being negatively affected from the development that is on island already, and there are years of new development that have already been approved, before having safe resources and infrastructures for new developments.

With these scientifically proven articles by some of the most professional scientists in the world, they say the a serious population increase, as well as development and resort runoff that happens because of parking lots, and... with all coastal developments, it will be dangerous for Keauhou Bay to be development because it will damage the marine ecosystems in the area.

Please, save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools because all of these articles prove it would be extremely damaging to the waters at Keauhou Bay.

Thank you,

Sincerely,

Rebecca Melendez

██████████

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Rebecca Melendez

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**From:** Rebecca Melendez <[REDACTED]>  
**Sent:** Tuesday, August 6, 2024 12:46 PM  
**To:** 221053-01 KS Keaouhou Entitlements; Roy, Alex; Planning@hawaiiicounty.gov; Keaouhoubay@ksbe.edu  
**Subject:** Reject Kamehameha Schools EIS because of 2 Important Laws  
**Attachments:** Report\_Kahaluu\_Water\_Quality\_Research\_Summary.pdf; Comments DEIS Keaouhou bay final copy.pdf; Keaouhou Bay Is stated Impaired Water by the EPA Clean Water Act.jpg

**Categories:** Yellow Category

To whom it may concern,

Please reject Kamehameha Schools EIS under the Cultural Impact Statement Law which states, "Cultural assessment" means a written evaluation conducted by a qualified ethnographer as defined by the state historic preservation division to determine whether an action may have a significant effect on cultural practices, **particularly native Hawaiian traditional and customary practices expressly protected under article XII, section 7, of the state constitution.**

"Cultural impact assessment" means an ethnographic study prepared in accordance with the rules adopted pursuant to this chapter by a qualified ethnographer as defined by the state historic preservation division, which shall disclose any cultural effects of a proposed action, including **the cultural practices of the community and State**, proposed measures to minimize adverse effects, and alternatives to the action and its cultural effects." [https://www.capitol.hawaii.gov/sessions/session2020/bills/SB3152\\_.HTM#:~:text=Rrequires%20cultural%20assessments%20to%20be%20available%20for%20public,may%20have%20a%20significant%20effect%20on%20the%20environment.](https://www.capitol.hawaii.gov/sessions/session2020/bills/SB3152_.HTM#:~:text=Rrequires%20cultural%20assessments%20to%20be%20available%20for%20public,may%20have%20a%20significant%20effect%20on%20the%20environment.)

Please reject this EIS because it has NO reports on Hawaiian or community cultural practices in the bay that will be affected during this development and after it is finished.

Please reject this EIS because it has NO interviews with the Hawaiian people and community locals who use this bay, to learn how this bay is used daily by the Hawaiian people and locals in the bay, and under the Cultural Impact Statement Law this needs to be done to fully understand how this development will impact the Hawaiian people and community local's cultural practices.

That law requires that impacts to the Bay be mitigated and that further impairment does not occur. This requirement under the law has not been met."

Please reject Kamehameha Schools EIS because Keaouhou Bay is listed as **Impaired under the Environmental Protection Act for Clean Water** and this development will add more pollution into the bay. "The **Clean Water Act (CWA)** is the **primary Federal statute regulating the protection of the nation's water**. The CWA aims to prevent, reduce, and eliminate pollution in the nation's water in order to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters", as described in CWA section 101(a). A stated goal of the CWA is to eliminate discharge of pollutants into navigable waters, as that term is defined in CWA § 502(7) and corresponding case law." <https://www.epa.gov/enforcement/clean-water-act-cwa-and-federal-facilities>

I have attached a screenshot of Keaouhou Bay on the EPA Impaired water list and here is the link for **Keaouhou Bay (Kona)** **Assessment Unit ID: HI713293** <https://mywaterway.epa.gov/waterbody-report/21HI/HI713293/2020>

The goal of the Clean Water Act (CWA) is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (33 U.S.C §1251(a)) and Kamehameha Schools Bungalow Resort will devastate the entire ecosystem in Keaouhou Bay.

Kamehameha Schools EIS needs to be rejected because Kamehameha Schools has not contacted hundreds of Hawaiian people, especially descendants from Keaouhou Bay and spoken with them about how they would feel about their Endowed land that was given to Kamehameha Schools as trustees by Princess Bernice Pauahi Bishop for the Hawaiian people to benefit from and under Cultural Impact Law these people **MUST BE CONTACTED**.

Here is a video by Kupuna Kuryu Lily Kong and she states that her and her mother are against development. She was born in Keaouhou Bay and SHE has the right to be heard <https://vimeo.com/994680462>

Please reject Kamehameha Schools EIS under the Cultural Impact Statement Law as well as under the EPA Clean Water Act listing that Keaouhou Bay is declared Impaired Water Body Under Section 303 D.

Thank you,  
Rebecca Melendez

Hawaiian cultural practices are canoe paddling and by creating this bungalow resort you will be taking away all the one man canoes that are at the bay to make room for tourists. This is not honoring Hawaiian canoe traditional practices and is going against the Cultural Impact Statement Law.

Hawaiian cultural practices are also fishing and if you allow this bungalow resort to be developed there will be hundreds of tourists in the bay preventing Hawaiian fishermen from safely fishing without accidentally hooking a tourist who is swimming by. This goes against the Cultural Impact Statement Law because there won't be any room for fishermen to enjoy fishing at the bay because the bay is so small that having more paddle boards, more kayaks, more people swimming...will take away from Hawaiian cultural practice of being able to fish safely in Keaouhou Bay and this goes against the Cultural Impact Statement Law.

This EIS has not done any studies on "cultural practices of the community" and there are many baptisms and funeral services held in the bay and creating a bungalow resort in this area would create a tourists destination with hundreds of tourists all over this bay and baptisms and funeral services will become challenging to have for the community in this small historical bay because tourists will be there sunbathing everywhere and this will go against the Cultural Impact Statement Law for the community who have enjoyed this small historical bay to perform their cultural practices of baptisms and funeral services.

Please reject Kamehameha Schools EIS because a bungalow resort development will go against the Hawaiian cultural practices, as well as the communities cultural practices and this goes AGAINST the Cultural Impact Statement Law SB #3152.

I was sent these reports from Richard H. Bennett MS, PhD Applied Life Sciences LLC and Kamehameha Schools EIS needs to be rejected because of the researched information he has sent. Richard H. Bennet MS Phd states in his report that has been attached to this email.

"The following comments pertain specifically to water quality issues affecting Keaouhou Bay. The draft EIS does not address these nor accounts for the fact that the State and the EPA list Keaouhou Bay as an Impaired Water Body under section 303 D of the Clean Water Act (CWA).

## Summary of the Water Quality Research from Kahalu'u Bay, Hawai'i Island: Tidal Flows, Recreation Water Indicator Bacteria, and Nutrient Fluxes

R.H. Bennett Ph.D.<sup>1</sup>, and K. M. Clark<sup>2</sup>

The Kahalu'u Bay Education Center (a program of The Kohala Center) actively strives to inform visitors and the community about the protection and conservation of the bay's marine ecosystem. A group of committed volunteers and staff provide daily, on-site educational programs. Similarly, they have collected scientific data about the bay for over a decade. This trove of data is priceless. It tells us much about the interaction of the ocean with the adjacent urban lands. Except for the marine waters of Kaloko Honokōhau National Historical Park, no other maritime site in Kona has been studied so thoroughly and for so long.

The data from Kahalu'u Bay gave rise to three technical research reports. They are:

- I. Tidal Influence on Temperature and Salinity
- II. Elevated Kahalu'u Bay Enterococci Associated with Large Tidal Flux
- III. Kahalu'u Bay Nutrient Trends 2009 to 2019

The purpose of this summary is to provide an easy-to-understand synopsis of the three technical reports to enable the community to "see below sea level" so that we may be better informed of the best stewardship of our nearshore waters.

### I. Tidal and Ground Water Influence on Bay Waters

The mountains above Kailua Kona are blessed with abundant rainfall. Some sites get over 70 inches of rain per year. Yet there are no rivers or streams. On the Hilo side of the island, there are over 200 streams. So, in Kona, where does all that water go? It percolates quickly through the fractured lava rock and forms a fresh groundwater lens that floats upon the seawater that permeates the island. From there, fresh groundwater flows toward the shore. It includes a nearshore subterranean estuary (STE). In the estuary, groundwater and seawater mix under the forces of tidal action. Four times a day, the tides rise and fall. During the Spring Tides, massive tidal fluxes of over two feet push and pull on the estuary with great force.

Groundwater eventually discharges along the coast as a cold mixture of fresh water and recirculated seawater. For those that swim in the ocean, encountering cold spots is inevitable. For snorkelers, these surface cold spots can have hazy visibility. This is a refraction caused by the incomplete mixing of seawater and groundwater. The fresher water is less dense and floats on the ocean surface in many locations.

<sup>1</sup> Applied Life Sciences LLC, and Waiwai Olu Ohana

<sup>2</sup> The Kahalu'u Bay Education Center, The Kohala Center

In the Kahalu'u Bay shore area, there are pronounced discrete locations where water flows can be seen, and the coolness is perceived. In other places, the brackish water is more diffuse. And yet, in some offshore sites, the cold brackish water emerges from the floor of the ocean. Most of all, water that does not evaporate flows into the sea one way or another. Water is almost a perfect solvent. A high number of things dissolve in it even though it may remain crystal clear. In the kitchen, we can dissolve a lot of salt or sugar in a glass of water without changing its appearance.

Figure 1. Kahalu'u Bay Shoreline Sample Sites



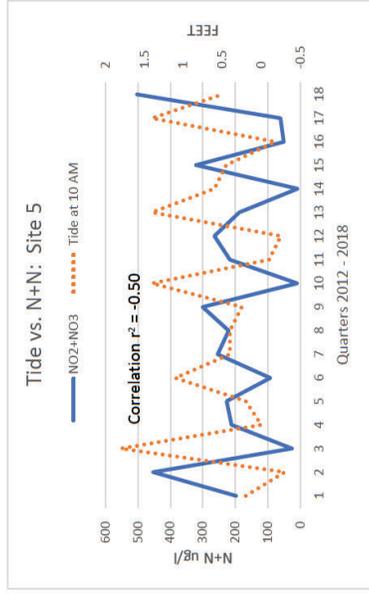
This site map of the bay shows where water samples are collected. Site one is where water flow at low tide can be seen. At low tide, the salinities at site 1 differed from the others. At high tide, the salinity of sites 1 - 4 was different from 5. This shows that water inflow can be very localized. We know that lava tubes and fractured rock can provide such a discrete conveyance.

Statistical Distribution of Salinity 2017  
Low tide, 29.36 Orange vs. High Tide 32.26 ppt Green

Similarly, it should not be too hard to imagine how the flow of the tides can influence the

temperature of the nearshore water. Ocean water is warmer and more saline. Thus, a good high tide will render the nearshore water warmer and saltier. At a very low tide, the converse is also true.

Figure 2. The Influence of Tides on Nitrogen Concentration.



At low tide, groundwater flows increase, and salinity and temperature decrease quite dramatically. This suggests the volume of water flowing into the bay is massive. As shown in Figure 2., over a 4.5-year period, there is an inverse relationship between the tide level and the concentration of Nitrogen (N) measured as Nitrate and Nitrite. The effect is simply seawater, that is lower in Nitrogen is diluting the higher N groundwater Nitrogen content. Thus, it is critical that tidal effects be accounted for in any monitoring of marine nitrogen. Accounting for groundwater Nitrogen concentrations flowing into near shore waters is a requirement of Hawai'i Administrative Rules when conducting water tests.<sup>3</sup>

UH researchers using some advanced chemistry with Radon isotopes, estimate for each mile of the Kona Coastline between one to three million gallons of groundwater flow into the sea per mile of coastline per day. On the Hilo side, the flow of water from the land can be seen in rivers and streams. On the Kona side, it is unseen but still vast in many submarine groundwater discharges.

One way we can see this flow is to use cameras that see temperature, called infra-red (IR). This IR photo was taken of a submarine groundwater discharge, just north of the Kona Airport. The cold, fresh water (shown by the cooler colors in the image) extends over 200 yards out to sea.

<sup>3</sup> Hawai'i Administrative Rules §11-54-6(B)

Figure 3. Thermal Image of a Prominent Submarine Groundwater Discharge. Adapted from Johnson (2008)

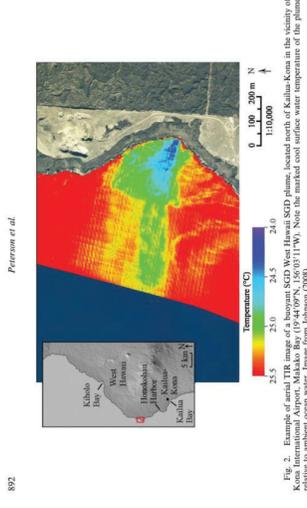
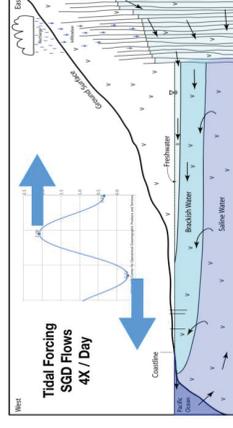


Fig. 3. Thermal image of a prominent submarine groundwater discharge. Note the visibility of Kona International Airport, Makaha Bay (19°44'09"N, 156°09'11"W). Note the marked cool surface water temperature of the plume relative to ambient ocean water. Image from Johnson (2008).

The take-home story in this section is that groundwater flows dramatically alter the nearshore ocean and it's easily detected and measured with simple instruments like a thermometer or salinity meter. This will take on greater significance in Part III.

Figure 4. The Tidal Forces that Drive the Subterranean Estuary (STE) on the Kona Shore.



Adapted from Johnson 2017

The greater Kona area is underlain by a complex network of fissures and crevasses filled with saline waters. Anchialine Ponds are a common feature of this geology, yet rather unique to Kona, Hawaii. The term, Subterranean Estuary (STE) more aptly describes these structures (Bishop 2015). Monitoring wells tracked by NELHA<sup>4</sup> as far as one mile inland provide evidence

of seawater intrusion and water levels consistent with tidal action (Peterson 2009). This fact is largely unrecognized by the state as well as the community. The implications are profound. Marine waters of the Kona Coast communicate with ground water well inland and vice versa. Nonetheless, wastewater discharges to land in this region are likely to be impacting the waters of the coast and circumventing requirements for the regulation of such waste discharges to the waters of the United States.<sup>5</sup>

<sup>4</sup> NELHA CEMP Report <https://nelha.hawaii.gov/resources/library/nelha-lab-reports/>

<sup>5</sup> *City of Maui v. How. Wildlife Fund*, 140 S. Ct. 1462, 1476 (Apr. 23, 2020)

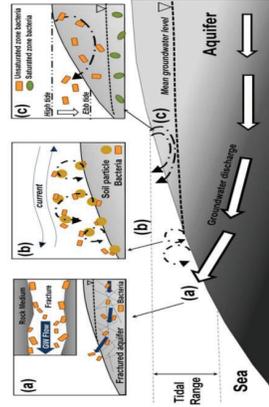
## II. Influence of Tides on the Recreation Safety Bacterial Water Quality Indicator

When the local news recently (Jan 8, 2019) reported several beaches on Oahu were closed due to elevated Enterococci (ENT) indicator bacteria, and Kahalu'u Bay was "Posted" by the Health Department of Hawai'i, at about the same time. These events raised curiosity. There had been no significant rain events on the islands, and no sewer spills to cause health department warnings. Instead, the warnings arose for beaches widely separated geographically and simply because the levels of ENT were elevated above the regulatory threshold.

The State Department of Health monitors the indicator bacteria Enterococci (ENT). The official belief was that ENT was a useful marker for fecal contamination. A lot of science has shown that it is not a valid indicator, nonetheless, it is still the official test (Boehm 2009). This ENT monitoring data is part of the Kahalu'u Bay collection. When the Bay was posted as contaminated in January, it generated posed a question. We were having colossal Spring Tides at the time. Could the tides have something to do with the bacteria levels? The bottom line is indeed they do. But how?

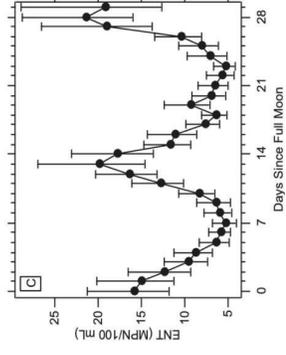
The ENT bacteria are common to land and water sources even where there is no fecal matter at all. They grow in wet places like culverts, compost piles, drainpipes, and wetlands. From there they flow into the sea, and they make a home there too. They can be found floating in the seawater, and that is where the state measures them. But more critically, they live and grow in wet beach sand above and below water level. Many times, more ENT can be found in the beach sand than in the water above.

Figure 5. How Tidal Circulation at the Shore Conveys Indicator Bacteria to the Water Column (Lee 2017)



A super high tide followed by a minus low tide and allows for a huge water outflow from the STE. The water flows above and through the sand dispersing ENT up into the water column where the ENT can be detected and counted. When the ENT count is high, beaches get warning signs and may be closed.

Figure 6. Lunar – Tidal Influence on Marine Water Enterococci (Boehm 2005)



This graph shows the ENT count and the moon cycle. Fourteen days after a full moon are the astronomical Spring Tides and associated rise in the ENT. This tidal force literally stirs things up.

There remains a distinct possibility that elevated ENT counts are often an artifact of the tide cycle at the time of sampling. This bias likely triggers official warnings where there is no apparent health risk events like sewage spills or flooding.

However, given that the region near Kahalu'u Bay is not served by sewer and most homes have utilized cesspits for decades, sewage components may be conveyed to the ocean by groundwater. Microbiologists have documented the presence of human virus in seawater when the ENT is low or absent. The need for a better risk indicator is great. Stable chemical indicators of sewage such as Sucralose (Bennett 2021) and an MRI diagnostic marker (Johannesson 2017) show promise in wastewater tracking research conducted in Hawaii Island.

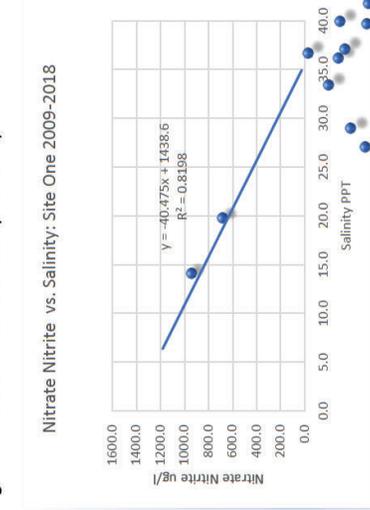
The real good news about the safety of recreation water in Hawaii is the sun. The intense midday UV sunlight penetrates clear water and kills microbes in a matter of hours. We shall see, however, in the next section, clear ocean water is less common these days.

## III. The Nutrients Nitrogen and Phosphorus in Nearshore Groundwater<sup>6</sup>

It is well established that brackish groundwater flowing in discrete and diffuse STE is abundant in the nutrient's nitrogen and phosphorus. According to University of Hawai'i researchers, wherever there is cold STE water flows, elevated nutrients are present (Johnson 2008). These flows result in thousands of pounds of nutrients being conveyed daily to the nearshore waters. Tropical water ecosystems are naturally low in nutrients (De Goeij 2013), and yet corals have adaptations to these conditions. Unfortunately, decades of human derived nutrients in the ocean nourish algal biomass expansion to the detriment of the corals.

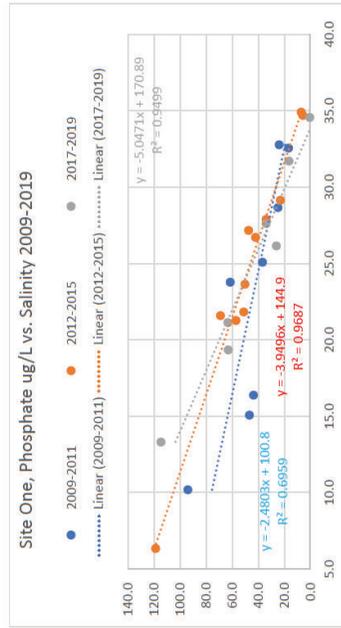
<sup>6</sup> All nutrient analysis performed by the certified laboratory at NELHA

Figure 7. Nitrate-Nitrite Relationship to Salinity



This graph looks complicated, but it's not. Let's interpret. The line says, when sea water is saltier there is less N in it. Conversely, the fresher the water the higher N is there. Taken over 10 years in many locations in the bay and from other Kona Coast sites, this pattern is very consistent. Simply, it means the elevated N source is from the land and not from groundwater and not from the sea.

Figure 8. Phosphate Relationship to Salinity



This chart looks even more complicated, but it is just three sets of years P plotted against salinity. It shows a very similar relationship as the N chart. Yet here we are looking at a ten-year period in three phases. It answers the question, are things changing over time? For both N and P there is no evidence of a time trend. The nutrient concentrations in groundwater are staying about the same.

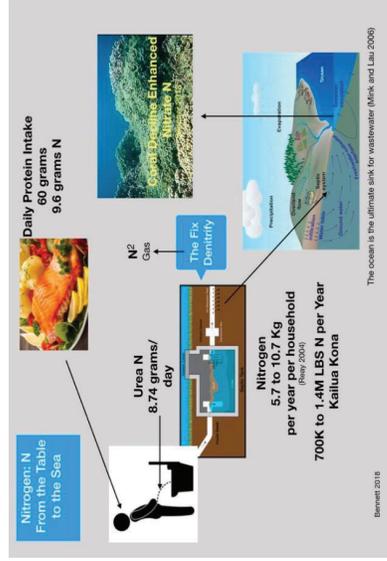
Just as for salinity and temperature in the first report, tidal action dilutes the groundwater and hence the N concentration (Fig. 2). Thus, if one was trying to say there is no problem or a lesser problem, the sample would be collected at the highest tide to get the lowest N level. In all future work, we must account for the tidal effect on nutrient concentration in nearshore waters.

A very large mass of the nutrients, N, and P, flow into the ocean for almost the entire Kona Coastline. Some have conveniently wanted to say the N and the P are natural, meaning this system was here before humans. While it is true, the mass of nutrients was far, far less as there was little importation of nutrients other than through fish consumption.

Given that, what is the reason for the large mass of nutrients? We are! A lot of research on this island and others shows very clearly that the N and P are from human activity. We say the elevated nutrients are anthropogenic, or human-associated. This includes the fertilizers imported and dispersed in landscape and agriculture. Yet the largest single source is the human diet and the nutrients we excrete daily.

For example, protein-rich foods contain much more N than starchy foods and vegetables. The proteins get absorbed and ultimately broken down and the nitrogen is excreted in the urine as urea. Leave urine in the bowl for a day and the bacteria break it down and form ammonia with its distinctive odor. In the environment, bacteria convert ammonia to nitrate. It is the same nitrate found in a bag of lawn fertilizer.

Figure 9. A Simple Mass Balance for Human Dietary Nitrogen Marine Impact



Each household, on average, contributes about 21 pounds of N per home per year. Add up all the homes in Kailua Kona and a year, and we can produce around a million pounds of N that flow into cesspits, septic systems, and treatment plants. No matter which one is used, most of the N ends up in the groundwater and the sea.

This fertilizer in the sea has the same effect as it does on your lawn. Instead of grass growing, the microscopic green plant microbes called phytoplankton grow and in high numbers make the

water shades of cloudy green. This growth absorbs sunlight making the natural UV disinfection of seawater less effective. Ecosystem research from Kaneohe Bay demonstrates that wastewater N in the bay has an additive effect with increased temperature to cause greater coral bleaching (Tanaka 2013).

Figure 10. Nitrogen Mass Dependent on Ground Water Flow Volume



Lastly, it is not sufficient just to know the concentration of the nutrient flowing into the bay as it tells us nothing of the mass or pounds in the flow. Thus, we must know or estimate the volume of the flow so that we can calculate the mass of nutrients delivered to the sea from the STE.

The blue arrows represent the same nutrient yet at very different flow volumes. The total mass of N, reaching the bay and impacting the ecosystem is very different. Where currents move and mix these nutrients to the open ocean, adverse impacts are less likely.

However, in protected embayments like Kaha'u, the transport and mixing is much less and the impact on the local ecosystem is more significant.

Think of it this way. A little soy sauce on food gives it just the right salt taste, but add a quarter cup of soy sauce on food and it becomes horribly salty. The salt in the soy is at the same concentration; there was simply more salt.

In the bay, we cannot alter the volume of water flowing in, just like we cannot stop a river. So, we need to employ the tools that reduce the concentration of N and P discharged to groundwater.

The people of Long Island NY, Cape Cod MA, and coastal Florida have severely polluted their estuaries from Septic Systems. The environmental and economic consequences are monumental. The residents put their collective shoulders to the wheel and financed solutions research. That research demonstrated a simple technique that removes the nutrients in human wastewater by over 90%. The states are implementing the "Layer Cake-Nitrogen Reducing Biosystem leach field. Kona can do this too. The consequences of "kicking the can down the road" will be dire. Sustainable Hawai'i must be our goal.

For over 35 years, Dr. Bennett has worked in the environmental science field where the land meets the water. From Tomales Bay CA, to New South Wales Australia to the Big Island wherever there are people and oceans there are huge challenges. A resident of Kona since 1999, he serves as Na Mako O Ke Kai (eyes of the sea) for the Kona Coast Waterkeeper Waiwai Ola Ohana.

**Acknowledgments**

Special appreciation goes out to Cindi Punihaole Kennedy, the founding director of The Kohala Center's Kaha'u Bay Education Center, and Marine Stewardship and Education Specialist Kathleen Clark. Together with many volunteers, they have collected high-quality data since 2009. The data is the basis of the three reports and this summary. Also extending appreciation to the former UH researcher James M. Bishop for his assistance in understanding the hydrology of Hawai'i Island and the review of the manuscripts.

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**List of Abbreviations**

ENT	Enterococci (a genus of bacteria)
IR	Infra-red
MPN	Most Probable Number (method for estimating bacteria concentration)
N	The element Nitrogen
N+N	Nitrate plus Nitrite
NELHA	Natural Energy Laboratory Hawaii Authority
NO2	Nitrite
NO3	Nitrate
P	The element Phosphorus
STE	Subterranean Estuary
UV	Ultra-violet
µg/l	Microgram per Liter

## References

### Part I. Tidal and Ground Water Influences

Prouty, Nancy G., Peter W. Swarzenski, Joseph K. Fackrell, Karen Johannesson, and C. Diane Palmore. "Groundwater-derived nutrient and trace element transport to a nearshore Kona coral ecosystem: Experimental mixing model results." *Journal of Hydrology: Regional Studies* 11 (2017): 166-177.

Peterston, R. N., Burnett, W. C., Glenn, C. R., & Johnson, A. G. (2009). Quantification of point-source groundwater discharges to the ocean from the shoreline of the Big Island, Hawaii. *Limnology and Oceanography*, 54(3), 890-904.

### Part II. Tidal Influence on Indicator Bacteria

Bennett, Richard H. "Geographic Distribution of *Saccharose* in the Kona Coastal Waters." Waterkeepers Technical Bulletin #808210414

Boehm, Alexandria B., and Stephen B. Weisberg. "Tidal forcing of enterococci at marine recreational beaches at fortnightly and semidiurnal frequencies." *Environmental science & technology* 39, no. 15 (2005): 5575-5583.

Boehm Jr, Alexandria B., Nicholas J. Ashbolt, John M. Colford Jr, Lee E. Dunbar, Lora E. Fleming, Mark A. Gold, Joel A. Hansel et al. "A sea change ahead for recreational water quality criteria." *Journal of Water and Health* 7, no. 1 (2009): 9-20.

Fleisher, Jay M., Lora E. Fleming, Helena M. Solo-Gabriele, Jonathan K. Kish, Christopher D. Sinigalliano, Lisa Plano, Samir M. Elmir et al. "The BEACHES Study: health effects and exposures from non-point source microbial contaminants in subtropical recreational marine waters." *International journal of epidemiology* 39, no. 5 (2010): 1291-1298.

Lee, Eunhee, Doyun Shin, Sung Pil Hyun, Kyung-Seok Ko, Hee Sun Moon, Dong-Chan Koh, Kyoohul Ha, and Byung-Yong Kim. "Periodic change in coastal microbial community structure associated with submarine groundwater discharge and tidal fluctuation." *Limnology and Oceanography* 62, no. 2 (2017): 437-451.

Yamahara, Kevan M., Sarah P. Walters, and Alexandria B. Boehm. "Growth of enterococci in unaltered, unseeded beach sands subjected to tidal wetting." *Applied and environmental microbiology* 75, no. 6 (2009): 1517-1524

### Part III. Nutrient Concentrations in Coastal Kahalu'u Bay

Bishop, James M., Craig R. Glenn, Daniel W. Amato, and Henrietta Dulai. "Effect of land use and groundwater flow path on submarine groundwater discharge nutrient flux." *Journal of Hydrology: Regional Studies* 11 (2017): 194-218.

Bishop, Renée E., William F. Humphreys, Neven Cukrov, Vesna Žic, Geoff A. Boxshall, Marijana Cukrov, Thomas M. Iliffe et al. "Anchialine' redefined as a submarine estuary in a crevicular or cavernous geological setting." *Journal of Crustacean Biology* 35, no. 4 (2015): 511-514.

Bristow, Laura A., Wiebke Mohr, Soeren Ahmerkamp, and Marcel MM Kuypers. "Nutrients that limit growth in the ocean." *Current Biology* 27, no. 11 (2017): R474-R478.

De Goeij, Jasper M., Dick Van Oevelen, Mark JA Vermeij, Ronald Osinga, Jack J. Middelburg, Anton FPM de Goeij, and Wim Admiraal. "Surviving in a marine desert: the sponge loop retains resources within coral reefs." *Science* 342, no. 6154 (2013): 108-110.

Johnson, Adam G., Craig R. Glenn, William C. Burnett, Richard N. Peterson, and Paul G. Lucey. "Aerial infrared imaging reveals large nutrient-rich groundwater inputs to the ocean." *Geophysical Research Letters* 35, no. 15 (2008).

Johannesson, Karen H., C. Dianne Palmore, Joseph Fackrell, Nancy G. Prouty, Peter W. Swarzenski, Darren A. Chevis, Katherine Telfeyan, Christopher D. White, and David J. Burdige. "Rare earth element behavior during groundwater-seawater mixing along the Kona Coast of Hawaii." *Geochimica et Cosmochimica Acta* 198 (2017): 229-258.

Klausmeier, Christopher A., Elena Litchman, Tanguy Daufresne, and Simon A. Levin. "Optimal nitrogen-to-phosphorus stoichiometry of phytoplankton." *Nature* 429, no. 6988 (2004): 171.

Lau, Leung-Ku Stephen, and John Francis Mink. *Hydrology of the Hawaiian Islands*. University of Hawaii Press, 2006.

Moore, Willard S. "The subterranean estuary: a reaction zone of ground water and sea water." *Marine Chemistry* 65, no. 1-2 (1999): 111-125.

Peterston, Richard N., William C. Burnett, Craig R. Glenn, and Adam G. Johnson. "Quantification of point-source groundwater discharges to the ocean from the shoreline of the Big Island, Hawaii." *Limnology and Oceanography* 54, no. 3 (2009): 890-904.

Reay, William G. "Septic tank impacts on ground water quality and nearshore sediment nutrient flux." *Groundwater* 42, no. 7 (2004): 1079-1089.

Tanaka, Katsumasa, Michael IW. Guidry, and Nicolas Gruber. "Ecosystem responses of the subtropical Kaneohe Bay, Hawaii, to climate change: a nitrogen cycle modeling approach." *Aquatic geochemistry* 19, no. 5 (2013): 569-590.

July 24, 2024,

VIA EMAIL

COMMENTS REGARDING:

Draft Environmental Impact Statement (DEIS)  
for the Kamehameha Schools Keauhou Bay Management Plan  
Keauhou, Hawai'i Island, Hawai'i

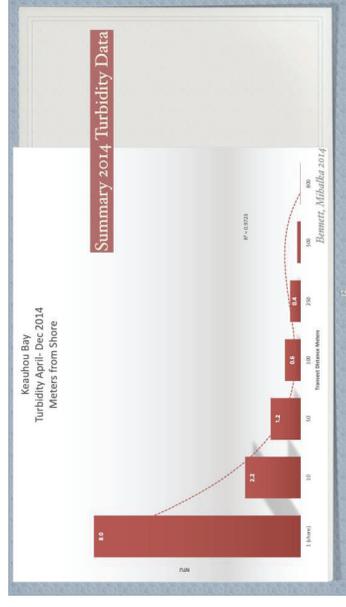
Richard H. Bennett MS, PhD  
Applied Life Sciences LLC

The following comments pertain specifically to water quality issues affecting Keauhou Bay. The draft EIS does not address these nor accounts for the fact that the State and the EPA list Keauhou Bay as an Impaired Water Body under section 303 D of the Clean Water Act (CWA). That law requires that impacts to the Bay be mitigated and that further impairment does not occur. This requirement under the law has not been met. Any development in the watershed needs to be conducted by a careful evaluation of this fact. Under the law, remediation begins by conducting a Total Maximum Daily Loading study known as a TMDL. The Bay is listed as impaired for exceeding the limits for turbidity. Turbidity has several causes in near-shore waters, such as runoff water with fine sediments and phytoplankton. Our research shows that turbidity is a problem in Keauhou Bay in the absence of surf events. The turbidity is also due to the overgrowth of marine phytoplankton. Our studies show that turbidity declines along a line moving offshore. The inner Bay has very poor circulation and is where most sediments and other factors causing turbidity arise. Phytoplankton grow in response to increased temperature and nutrient loading in the Bay. The lack of adequate circulation amplifies the problem.



The photo was taken in the summer of 2007 in response to concerns about the greening of Keauhou Bay. The brand name on the canoe paddle is not legible. (photo credit Bennett).

Figure 1. Nine-month summary of turbidity data for the Bay.



(Bennett 2002)

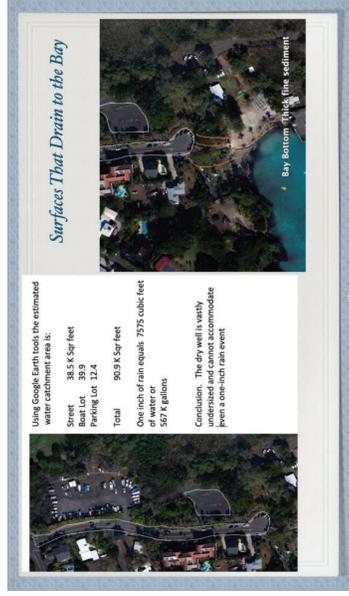
The nine-month summary chart above shows that turbidity is worse at the shoreline and decreases non-linearly in waters offshore. The slight rise in turbidity at 250 meters may be more of a phytoplankton effect than sediment.

The DEIS makes the following statement regarding groundwater.

*Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project in this area, surface runoff generally does not occur in the typical rainfall occurrence. Runoff either percolates into the underlying groundwater or evaporates into the atmosphere. There are no drainage reports or calculations on file with the County of Hawai'i or DOT for the adjacent public roadways or surrounding developed properties. However, existing stormwater runoff peak flow estimates for the three (3) drainage basins within the Project Area are presented in Table 4-4.*

The draft EIS fails to account for surface water runoff from Kamehameha III Road. At the Bayside terminus of the road is a dry well. It is typically loaded with sediment and unable to handle the storm flows that come down the length of the road. Thereafter, water overflows the curb and goes down the driveways and the slope into the Bay. As it does, it picks up considerable sediment and delivers it to the near-shore waters, increasing the turbidity problem (Fig 3).

Figure 2. Rain catchment area and water volume estimate.



(Bennett 2002)

As calculated above, a one-inch rain can produce over five hundred thousand gallons of water, with most of the flow eroding fine sediments as it enters the Bay (Figure 3). The County of Hawai'i was made aware of this dry well failure four years ago. Some of this water comes off of Kamehameha Schools land.

The DEIS statement that rainwater percolates to groundwater suggests groundwater is the terminus and the water does not flow to the sea. For at least 25 years, it was the position of the State that groundwater under the land does not communicate with the sea. Considerable research, such as Kneeb (2010), Dulai (2020), Peterson (2009), and others, shows that the State's policy is specious and not science-based. The State's anchialine system is a subterranean estuary (Bishop 2015). Consequently, the DEIS must reconsider the implication that the local groundwater is an inconsequential endpoint for fresh and waste water flows. A recent US Supreme Court decision held that wastewater disposal to the nearshore groundwater without the necessary permit was a violation of the CWA (see footnote page 7).

Figure 3. Stormwater and sediment Flow into the Bay.



The photos suggest considerable sediment erosion into the Bay.

Nutrient Degradation and Impairment of the Bay.

The draft EIS does not account for the elevated levels of nutrients in the Bay. Again, our research shows that nitrogen and phosphorus exceed state standards. Unlike other locations, it is unfortunate that the Hawai'i Department of Health fails to measure these nutrients in the Bay. Thus, conducting a nutrient analysis of the Bay waters was necessary. That analysis is provided below.

Table 1. Nutrient analysis along transects over three quarters of 2019

Location	Date	SI	SI	NH <sub>4</sub> -N	NO <sub>3</sub> -N	NO <sub>2</sub> -N	NH <sub>4</sub> <sup>+</sup>	NO <sub>3</sub> <sup>-</sup>	NO <sub>2</sub> <sup>-</sup>	Keolu Bay		Keolu Bay		Keolu Bay		
										µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Keolu Bay	1/22/19	5148	60.1	423.6	18.3	29.6	29.7	174.0	47.6	453.2						
Keolu Bay	1/22/19	5115	43.2	429.4	18.1	29.6	21.1	159.0	44.4	421.5						
Keolu Bay	1/22/19	5185	41.2	406.3	18.4	30.3	17.5	123.3	37.5	329.9						
Keolu Bay	1/22/19	5197	21.2	465.3	13.3	33.5	4.2	31.3	19.3	88.4						
Keolu Bay	4/15/19	5224	26.9	483.1	1.1	30.8	16.9	117.5	38.2	313.3						
Keolu Bay	4/15/19	5158	16.4	228.7	2.6	32.0	13.0	79.7	28.7	213.3						
Keolu Bay	4/15/19	5158	16.4	228.7	2.6	32.0	13.0	79.7	28.7	213.3						
Keolu Bay	4/15/19	5158	16.4	228.7	2.6	32.0	13.0	79.7	28.7	213.3						
Keolu Bay	7/20/19	5031	15.8	237.0	3.6	32.4	11.7	86.1	26.184	180.0						
Keolu Bay	7/20/19	1453	13.7	209.5	3.7	32.6	11.1	80.0	24.808	152.4						
Keolu Bay	7/20/19	1402	14.0	210.7	7.3	32.7	10.8	66.8	24.297	155.1						
Keolu Bay	7/20/19	220	3.7	24.8	5.3	38.3	5.8	5.7	14.233	21.8						

Note: The NELHA Lab has multiple certifications, including the State Department of Health

None of the nutrient values for water collected as shown above met state standards. The elevated nutrients in the Keolu Bay watershed come from various sources. A common misconception is that fertilizers applied to private properties and the local golf course are the significant sources. However, research shows that nutrient leaching from the Mauna Kea and Keolu golf courses is minor compared to the nearby homes on Puako Drive (Dialer 2011). The likely source is the myriad cesspools in the watershed. Some homes on the North peninsula of the Bay are connected to sewers, but most homes are not.

The elevated levels of ammonia suggest a water connection to fresh sources of animal and human waste. Ammonia in marine water is quickly converted to nitrate. Our data also shows the nitrogen and phosphorus levels exceed state standards for the Bay. Had the State collected this data, the EPA would declare water impairment from these nutrients. These elevated nutrients can cause the seasonal "greening" of the marine waters (Smith 2020).

The draft EIS makes no mention of nutrient pollution issues and implies that all new developments will be connected to the sewer line that transmits raw sewage to the Heeia wastewater treatment plant. The treated wastewater containing most of the nutrients in human waste is conveyed to the golf course to irrigate the golf course. It is not known the extent to which those nutrients leech into the groundwater and the Bay. It is also not known how much more water the golf course will utilize in the future.

Several residences and perhaps some commercial facilities in the proposed development area use cesspools or septic systems for human waste management. The impact on the Bay is significant and needs to be described and mitigated. However, this problem is not mentioned in

the DEIS. It is more than advisable that the Project connect all waste systems to the regional sewer.

It is well established that sewer lines leak, which is a function of many factors such as piping class and age (Rutch 2006). In the project area, some sewer lines are quite old. One such line on the East shore of the Bay broke during a significant tidal event. The DEIS does not account for sewer line leakage or the risk from extreme tidal events. This problem needs to be evaluated, and where sewer lines are at risk and need to be replaced by resilient lines such as High-Density Polyethylene (HDPE).

Figure 4. Nitrogen (delta N 15) signatures along the Keolu Region shoreline

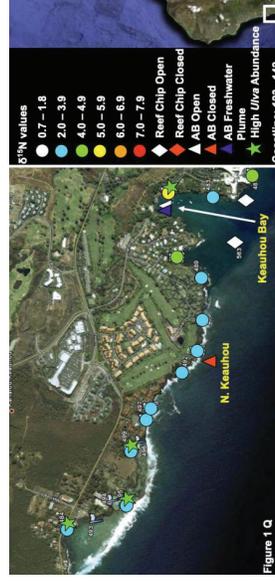


Figure 1 Q (Dailer 2011)

Nitrogen Signatures in the Keolu Area

The magnitude of the delta N 15 value indicates the greater contribution of human (animal) waste nitrogen. Raw sewage water is currently conveyed from the hotel at the Bay to the Heeia Wastewater Treatment Plant (HWWTP). The secondarily treated wastewater (WW) is provided to the local golf course for irrigation. How much water the golf course needs or could utilize is unknown. Casual observation of the course suggests that it is under-irrigated. Nutrients in the WW are not removed but beneficial to the grass. Delta N 15 data indicates that the golf course contributes negligible human (animal) nitrogen to the near-shore waters.

In contrast, the Delta N 15 values are higher in the Bay proper. The source is likely human waste from cesspools in the immediate region. Less than half of the homes are connected to sewer. It is imperative that the DEIS account for these sources and provide sewer design criteria for all new developments to be connected to the HWWTP.

Figure 5. Non-permitted wastewater discharge to the Bay



Some years ago, federal funds were provided to upgrade the Bay boat launch facilities. Before the upgrade, boat wash water flowed over the surface and into the Bay. A dry well was installed, and it drained to surface water only a few feet below the drain. Boat wash water is potable water. The wash water contains fish liquids, blood, and particulate fish waste. This wastewater may be a source of ammonia in the Bay. Washed bilge water often contains oil products. The data in Figure 5 is from the wash water surface drain at Honokohau Harbor.

Since it is obvious this wash water flows into the Bay in the groundwater, the State should have applied for an NPDES permit. Such a permit is required for any ocean discharge of wastewater, especially in waters known to be impaired under the CWA. This requirement has been affirmed by the Supreme Court<sup>1</sup>.

#### Conclusions

The surface water and groundwater flows from the proposed development and those in the upper watershed need to be considered to ensure that further degradation of this impaired water body does not occur. This is referred to herein as a TMDL. Given the environmental ethics of Kamehameha Schools and the legal history of the Public Trust Doctrine of the State Constitution<sup>2</sup>, we suggest that these environmental impacts described above be studied for the project design and mitigated.

<sup>1</sup> *Courty of Maui, Hawaii v. Hawaii Wildlife Fund*, 140 S. Ct. 1462, 590 U.S. 165, 206 L. Ed. 2d 640 (2020).

<sup>2</sup> *Kelly v. 1250 Oceanside Partners*, 140 P.3d 985, 111 Haw. 205 (2006).

Keaouhou Bay is a small bay inlet on Hawaii'i Island and, as such, is subject to much more degradation than the open shore area of West Hawaii'i. As such, the Bay requires special protections.

Sincerely,

/s/ R.H. Bennett MS, PhD, President

#### References

Bennett, R. H. The Impaired Waters of Keaouhou Bay, Hawaii'i Island 2022. [https://www.youtube.com/watch?v=pk\\_Q25bX0s](https://www.youtube.com/watch?v=pk_Q25bX0s)

Bishop, Renée E., William F. Humphreys, Neven Cukrov, Vesna Žic, Geoff A. Boxshall, Marijana Cukrov, Thomas M. Iliffe et al. "Anchialine" redefined as a subterranean estuary in a crevicular or cavernous geological setting." *Journal of Crustacean Biology* 35, no. 4 (2015): 511-514.

Dailer, M, Smith, C., Glenn, C. Preventing the introduction and spread of nutrient driven invasive algal blooms and coral reef degradation in West Hawaii'i, University of Hawaii'i, Manoa, Grant Number NA09NOS4260242, 9/30/2011

Dulai, Henrietta, Catherine Hudson, Trista Mckenzie, Brytne Okuhata, Diamond K. Tachera, and Aly El-Kadi, 2021. Geochemical Signatures of Coastal Groundwater Reflect Groundwater Flow Lines and Land-Uses in West Hawaii'i. Submarine Groundwater Discharge session, GDES; [International Tropical Islands Water Conference](#); University of Hawaii at Manoa, Honolulu, HI (via videoconference).

Knee, Karen L., Joseph H. Street, Eric E. Grossman>, Alexandria B. Boehm, and Adina Paytan. "Nutrient inputs to the coastal ocean from submarine groundwater discharge in a groundwater-dominated system: Relation to land use (Kona coast, Hawaii, USA)." *Limnology and Oceanography* 55, no. 3 (2010): 1105-1122.

Peterson, Richard N., William C. Burnett, Craig R. Glenn, and Adam G. Johnson. "Quantification of point-source groundwater discharges to the ocean from the shoreline of the Big Island, Hawaii." *Limnology and Oceanography* 54, no. 3 (2009): 890-904.

Rutsch, M., J. Rieckermann, and P. Krebs. "Quantification of sewer leakage: a review." *Water Science and Technology* 54, no. 6-7 (2006): 135-144.

Smith, Joseph S., Ryan J. Winston, R. Andrew Tirpak, David M. Wituszynski, Kathryn M. Boening, and Jay F. Martin. "The seasonality of nutrients and sediment in residential stormwater runoff: Implications for nutrient-sensitive waters." *Journal of environmental management* 276 (2020): 111248.

Rebecca Melendez

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**From:** Rebecca Melendez <[REDACTED]>  
**Sent:** Monday, July 29, 2024 1:46 PM  
**To:** 221053-01 KS Keaouhou Entitlements; Roy, Alex; Planning@hawaiicounty.gov; Keaouhoubay@ksbe.edu  
**Subject:** Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT!  
**Attachments:** Comments DEIS Keaouhou bay final (1).pdf  
**Categories:** Yellow Category

Aloha,

I received this letter from Richard H. Bennett MS, PhD Applied Life Sciences LLC to send to you. Please, see this information and know that this bungalow resort Development WILL have a serious negative impact on the bay because of the water quality he mentions in his letter.

Thank you,  
Sincerely,  
Rebecca Melendez

July 24, 2024,

VIA EMAIL

COMMENTS REGARDING:

Draft Environmental Impact Statement (DEIS)  
for the Kamehameha Schools Keauhou Bay Management Plan  
Keauhou, Hawai'i Island, Hawai'i

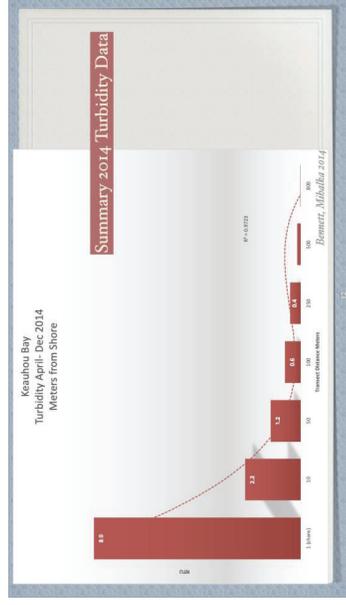
Richard H. Bennett MS, PhD  
Applied Life Sciences LLC

The following comments pertain specifically to water quality issues affecting Keauhou Bay. The draft EIS does not address these nor accounts for the fact that the State and the EPA list Keauhou Bay as an Impaired Water Body under section 303 D of the Clean Water Act (CWA). That law requires that impacts to the Bay be mitigated and that further impairment does not occur. This requirement under the law has not been met. Any development in the watershed needs to be conducted by a careful evaluation of this fact. Under the law, remediation begins by conducting a Total Maximum Daily Loading study known as a TMDL. The Bay is listed as impaired for exceeding the limits for turbidity. Turbidity has several causes in near-shore waters, such as runoff water with fine sediments and phytoplankton. Our research shows that turbidity is a problem in Keauhou Bay in the absence of surf events. The turbidity is also due to the overgrowth of marine phytoplankton. Our studies show that turbidity declines along a line moving offshore. The inner Bay has very poor circulation and is where most sediments and other factors causing turbidity arise. Phytoplankton grow in response to increased temperature and nutrient loading in the Bay. The lack of adequate circulation amplifies the problem.



The photo was taken in the summer of 2007 in response to concerns about the greening of Keauhou Bay. The brand name on the canoe paddle is not legible. (photo credit Bennett).

Figure 1. Nine-month summary of turbidity data for the Bay.



(Bennett 2002)

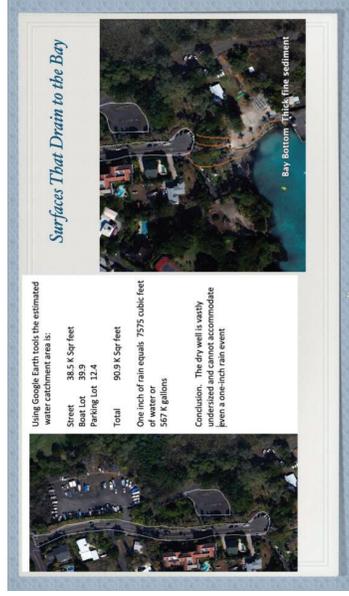
The nine-month summary chart above shows that turbidity is worse at the shoreline and decreases non-linearly in waters offshore. The slight rise in turbidity at 250 meters may be more of a phytoplankton effect than sediment.

The DEIS makes the following statement regarding groundwater.

*Due to the low frequency of substantial rainfall and high permeability of the soils throughout the Project in this area, surface runoff generally does not occur in the typical rainfall occurrence. Runoff either percolates into the underlying groundwater or evaporates into the atmosphere. There are no drainage reports or calculations on file with the County of Hawai'i or DOT for the adjacent public roadways or surrounding developed properties. However, existing stormwater runoff peak flow estimates for the three (3) drainage basins within the Project Area are presented in Table 4-4.*

The draft EIS fails to account for surface water runoff from Kamehameha III Road. At the Bayside terminus of the road is a dry well. It is typically loaded with sediment and unable to handle the storm flows that come down the length of the road. Thereafter, water overflows the curb and goes down the driveways and the slope into the Bay. As it does, it picks up considerable sediment and delivers it to the near-shore waters, increasing the turbidity problem (Fig 3).

Figure 2. Rain catchment area and water volume estimate.



(Bennett 2002)

As calculated above, a one-inch rain can produce over five hundred thousand gallons of water, with most of the flow eroding fine sediments as it enters the Bay (Figure 3). The County of Hawai'i was made aware of this dry well failure four years ago. Some of this water comes off of Kamehameha Schools land.

The DEIS statement that rainwater percolates to groundwater suggests groundwater is the terminus and the water does not flow to the sea. For at least 25 years, it was the position of the State that groundwater under the land does not communicate with the sea. Considerable research, such as Kneeb (2010), Dulai (2020), Peterson (2009), and others, shows that the State's policy is specious and not science-based. The State's anchialine system is a subterranean estuary (Bishop 2015). Consequently, the DEIS must reconsider the implication that the local groundwater is an inconsequential endpoint for fresh and waste water flows. A recent US Supreme Court decision held that wastewater disposal to the nearshore groundwater without the necessary permit was a violation of the CWA (see footnote page 7).

Figure 3. Stormwater and sediment Flow into the Bay.



The photos suggest considerable sediment erosion into the Bay.

Nutrient Degradation and Impairment of the Bay.

The draft EIS does not account for the elevated levels of nutrients in the Bay. Again, our research shows that nitrogen and phosphorus exceed state standards. Unlike other locations, it is unfortunate that the Hawai'i Department of Health fails to measure these nutrients in the Bay. Thus, conducting a nutrient analysis of the Bay waters was necessary. That analysis is provided below.



Figure 5. Non-permitted wastewater discharge to the Bay



Some years ago, federal funds were provided to upgrade the Bay boat launch facilities. Before the upgrade, boat wash water flowed over the surface and into the Bay. A dry well was installed, and it drained to surface water only a few feet below the drain. Boat wash water is potable water. The wash water contains fish liquids, blood, and particulate fish waste. This wastewater may be a source of ammonia in the Bay. Washed bilge water often contains oil products. The data in Figure 5 is from the wash water surface drain at Honokohau Harbor.

Since it is obvious this wash water flows into the Bay in the groundwater, the State should have applied for an NPDES permit. Such a permit is required for any ocean discharge of wastewater, especially in waters known to be impaired under the CWA. This requirement has been affirmed by the Supreme Court<sup>1</sup>.

#### Conclusions

The surface water and groundwater flows from the proposed development and those in the upper watershed need to be considered to ensure that further degradation of this impaired water body does not occur. This is referred to herein as a TMDL. Given the environmental ethics of Kamehameha Schools and the legal history of the Public Trust Doctrine of the State Constitution<sup>2</sup>, we suggest that these environmental impacts described above be studied for the project design and mitigated.

<sup>1</sup> *Courty of Maui, Hawaii v. Hawaii Wildlife Fund*, 140 S. Ct. 1462, 590 U.S. 165, 206 L. Ed. 2d 640 (2020).

<sup>2</sup> *Kelly v. 1250 Oceanside Partners*, 140 P.3d 985, 111 Haw. 205 (2006).

Keaouhou Bay is a small bay inlet on Hawaii'i Island and, as such, is subject to much more degradation than the open shore area of West Hawaii'i. As such, the Bay requires special protections.

Sincerely,

/s/ R.H. Bennett MS, PhD, President

#### References

Bennett, R. H. The Impaired Waters of Keaouhou Bay, Hawaii'i Island 2022. [https://www.youtube.com/watch?v=pk\\_Q25bX0s](https://www.youtube.com/watch?v=pk_Q25bX0s)

Bishop, Renée E., William F. Humphreys, Neven Cukrov, Vesna Žic, Geoff A. Boxshall, Marijana Cukrov, Thomas M. Iliffe et al. "Anchialine" redefined as a subterranean estuary in a crevicular or cavernous geological setting." *Journal of Crustacean Biology* 35, no. 4 (2015): 511-514.

Dailer, M, Smith, C., Glenn, C. Preventing the introduction and spread of nutrient driven invasive algal blooms and coral reef degradation in West Hawaii'i, University of Hawaii'i, Manoa, Grant Number NA09NOS4260242, 9/30/2011

Dulai, Henrietta, Catherine Hudson, Trista Mckenzie, Brytne Okuhata, Diamond K. Tachera, and Aly El-Kadi, 2021. Geochemical Signatures of Coastal Groundwater Reflect Groundwater Flow Lines and Land-Uses in West Hawaii'i. Submarine Groundwater Discharge session, GDES; [International Tropical Islands Water Conference](#); University of Hawaii at Manoa, Honolulu, HI (via videoconference).

Knee, Karen L., Joseph H. Street, Eric E. Grossman>, Alexandria B. Boehm, and Adina Paytan. "Nutrient inputs to the coastal ocean from submarine groundwater discharge in a groundwater-dominated system: Relation to land use (Kona coast, Hawaii, USA)." *Limnology and Oceanography* 55, no. 3 (2010): 1105-1122.

Peterson, Richard N., William C. Burnett, Craig R. Glenn, and Adam G. Johnson. "Quantification of point-source groundwater discharges to the ocean from the shoreline of the Big Island, Hawaii." *Limnology and Oceanography* 54, no. 3 (2009): 890-904.

Rutsch, M., J. Rieckermann, and P. Krebs. "Quantification of sewer leakage: a review." *Water Science and Technology* 54, no. 6-7 (2006): 135-144.

Smith, Joseph S., Ryan J. Winston, R. Andrew Tirpak, David M. Wituszynski, Kathryn M. Boening, and Jay F. Martin. "The seasonality of nutrients and sediment in residential stormwater runoff: Implications for nutrient-sensitive waters." *Journal of environmental management* 276 (2020): 111248.

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**From:** Rebecca Melendez <[REDACTED]>  
**Sent:** Wednesday, August 7, 2024 4:52 PM  
**To:** 221053-01 KS Keaouhou Entitlements; Roy, Alex; Planning@hawaiicounty.gov; Keaouhoubay@ksbe.edu  
**Subject:** Reject Kamehameha Schools EIS  
**Categories:** Yellow Category

Aloha,

Please reject Kamehameha Schools EIS because Keaouhou Bay is declared Impaired water HI713293 by the EPA Clean Water Act. This bay needs to be preserved because it is a natural resource that is very sensitive.

"The State of Hawaii Conservation District is a designated land area managed by the Department of Land and Natural Resources (DLNR) through the Office of Conservation and Coastal Lands (OCCL). This district was established to protect Hawaii's natural resources and encompasses various land types including watersheds, scenic areas, parklands, wilderness areas, beach reserves, and habitats for endemic plants and wildlife. The Conservation District also includes submerged lands makai of the shoreline."

<https://dlnr.hawaii.gov/occl/conservation-district/>

Keaouhou Bay is a natural resource and NEEDS TO BE PROTECTED. Under the EPA Clean Water Act it is Impaired water area and DLNR it should be conserved because it is an extremely sensitive area. <https://dlnr.hawaii.gov/occl/conservation-district/>

The district is divided into five subzones:

- Protective: The most environmentally sensitive areas.
- Limited: Areas with some environmental sensitivity.
- Resource: Areas designated for resource conservation.
- General: The least environmentally sensitive areas.
- Special: Areas with unique land uses

Rebecca Melendez

**From:** Rebecca Melendez <[REDACTED]>  
**Sent:** Wednesday, August 7, 2024 4:00 PM  
**To:** 221053-01 KS Keauhou Entitlements; Roy, Alex; Planning@hawaiicounty.gov; Keauhobay@ksbe.edu  
**Subject:** Please Reject KS EIS  
**Categories:** Yellow Category

Aloha,

Please reject Kamehameha Schools Bungalow Resort EIS for the fact that Big Island does NOT have the resources for ANOTHER resort in the Keauhou area. Because their resort development, "project area is bordered on the west by the Pacific Ocean, the Kona Country Club on the east, a residential subdivision to the north and on the south by the Outrigger Kona Resort and Spa and Hōlua Resort at Mauna Loa Village." <https://bigislandnow.com/2024/08/07/kamehameha-schools-management-plan-for-keauhou-bay-draws-waves-of-community-opposition/>

There are plenty of resorts and vacation rentals in the Keauhou Bay area already and these resorts have the use of a lot of the island's water resources, especially the golf course.

"Water allocation or who gets how much has always been an issue in Hawaii. Hawaii has one of the world's most aspirational water policies for a reason. We are an isolated island chain, and our economies and health of our citizens are dependent on ensuring our water security future.

We have indigenous cultures and communities, who evolved with flowing water in their streams, with legitimate historic and current grievances about loss of their water rights. We have unique species that are dependent on flowing waters from the mountains to the sea. <https://www.civilbeat.org/2024/01/why-reform-of-hawaiis-water-policy-may-now-be-necessary/>

"In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "we're in deep trouble."

Despite being surrounded by seemingly endless ocean, freshwater on Oahu, the third-largest of Hawaii's six major islands, is not easily accessible. The island relies on an underground aquifer for its water supply. Replenishing that aquifer is a decades-long natural process, as it takes a single drop of water roughly 25 years to make it there from the sky." <https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

"(BIWN) – With moderate to severe drought conditions being reported across Hawaii island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawaii'i island is under "Moderate Drought" conditions, according to the latest information [from the U.S. Drought Monitor](#). There is an area under "Abnormally Dry" conditions in

South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u." [https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawaii%CA%BBi-island-prompt-water-supply-message/#google\\_vignette](https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawaii%CA%BBi-island-prompt-water-supply-message/#google_vignette)

Please reject Kamehameha Schools EIS because of SECTION 1. Act 50, Session Laws of Hawaii 2000 (Act 50), amended chapter 343, "...Native Hawaiian culture plays a vital role in preserving and advancing the quality of life and cultural vitality of Hawaii". Additionally, the rights of native Hawaiians are codified in the Hawai'i State Constitution, as well as other state laws and judicial decisions."

This resort Bungalow Resort development WILL turn Keauhou Bay into another tourist area and it WILL lose the presence that is there, especially on the weekends because many local Hawaiians are in Keauhou Bay barbecuing and swimming with their families and if you make this a resort, tourists will take up the bay and Hawaiians and community locals won't be able to enjoy it because it is an extremely small bay and will have more tourists and this is against Act 50 SB3152 Cultural Impact Law.

There is enough room in the small park for a few Hawaiian families to enjoy the bay with their kids, while the canoe club practices racing and that is it. They need to go to Keauhou Bay on the weekends to see Hawaiian families (the beneficiaries of this Endowed land that they own) enjoying the small park that is there because if this development is created there won't be room for Hawaiians or community locals and this goes against Act 50 SB3152 Cultural Impact Law

The Hawaiian people and local community will lose the privilege of having single man canoes in the bay because this EIS wants to decrease the canoe clubs land use that they have been using for over 60 years and there are a lot of Hawaiian people who are part of this canoe club because, "A [brief history of Hawaiian Canoe outriggers](#) The history of Hawaiian canoe outriggers is deeply rooted in the rich maritime traditions of the indigenous Polynesian people who first settled in Hawaii around 1,500 years ago. These early settlers brought with them advanced navigation and canoe-building skills, which played a crucial role in shaping Hawaiian culture and society." <https://thishawaiilife.com/hawaiian-canoe-culture/>

Taking this land away that gives the Hawaiian people (the beneficiaries of this Endowed land) a place to race and enjoy their canoes, and giving this land to tourists is against Act 50 SB3152 Cultural Impact Law because canoe paddling has been a cultural practice for thousands of years because taking this away WILL have significant impact on this cultural practice.

Volleyball has turned into a Hawaiian cultural practice because it has been played for over 60 years and is played at the state of Hawaii University <https://hawaiiathletics.com/sports/womens-volleyball> and <https://hawaiiathletics.com/sports/mens-volleyball> and the kids that play volleyball in this area are Hawaiian kids. Taking volleyball away would be against Act 50 SB3152 Cultural Impact Law because taking this away WILL have significant impact on this cultural practice.

### "The Importance of Fishing in Hawaiian Society

Fishing was not merely a means of putting food on the table; it was the lifeblood of Hawaiian society. The islands' isolation in the vast Pacific Ocean meant that the Hawaiians had to rely heavily on their marine resources for sustenance. Fish provided a primary source of protein in their diet, supplemented by taro, breadfruit, and other agricultural products." <https://www.nanihawaii.com/hawaii-ancient-fishing-practices>

It is Hawaiian Culture to fish and I have seen net fishing and pole fishing in Keauhou Bay. There are many Kapuna who fish in Keauhou Bay daily and right now they have room to enjoy their culture practice in Keauhou Bay. If you allow this resort development you will be flooding this small historical bay with swimming tourists, standup paddle boards, kayaks... and take away the room that these Hawaiian people (the beneficiaries of this Endowed land) to enjoy their fishing culture and this is against Act 50 SB3152 Cultural Impact Law because causing a flood of tourists to come into this small bay WILL have significant impact on this cultural practice.

This petition [https://www.change.org/p/save-keauhou-bay-from-becoming-a-big-crowded-resort?utm\\_source=share\\_petition&utm\\_medium=custom\\_url&recruited\\_by\\_id=92a53560-1e91-11e5-b4ef-b94e90cedbdd](https://www.change.org/p/save-keauhou-bay-from-becoming-a-big-crowded-resort?utm_source=share_petition&utm_medium=custom_url&recruited_by_id=92a53560-1e91-11e5-b4ef-b94e90cedbdd) talks about the cultural practices that must be allowed to stay in Keauhou Bay and if you build this resort development you will be going against the thousands of Hawaiians (the beneficiaries of this Endowed land) and community locals who have signed this petition and who want to be able to keep their cultural practices alive and well in this bay and this is against Act 50 SB3152 Cultural Impact Law.

I sent you this petition info on the 5th with all the comments that had been written up to that time and that day there were 6,198 signatures. Today there are now 6,361 signatures because 200 more people signed this petition in 2 days. Hawaiians (the beneficiaries of this Endowed land) community locals and tourists DO NOT WANT A BUNGALOW RESORT. I have included the new comments on why people signed this petition below.

Petition Info: "Keauhou Bay is historical sacred land. It's also a small commercial and quiet residential area, with a local canoe club that uses the bay daily, local volleyball groups that play there daily, families BBQ every weekend, hold funeral services, baptisms local kids enjoy swimming, and visitors enjoy paddle boarding and kayaking all the time without a crowd..." These cultural practices will be negatively impacted by this resort development and it will go against Act 50 SB3152 Cultural Impact Law [https://www.capitol.hawaii.gov/sessions/session2020/bills/SB3152\\_.HTM#:~:text=Act%2050%2C%20Session%20Laws%20of%20Hawaii%202000%20%28Act,on%20cultural%20practices%20of%20the%20community%20and%20State.](https://www.capitol.hawaii.gov/sessions/session2020/bills/SB3152_.HTM#:~:text=Act%2050%2C%20Session%20Laws%20of%20Hawaii%202000%20%28Act,on%20cultural%20practices%20of%20the%20community%20and%20State.)

Please read Hawaiians, community locals and tourist comments on why they signed and understand Keauhou B has been used as a small Hawaiian community for hundreds of years and local community for over two hundred years and under the law, Act 50 SB 3152 Cultural Impact Law they have the right to keep it a small historical bay and not turn it into another big resort development area because this would significantly impact their culture in many different ways.

Rebecca Melendez

## Reasons for signing

See why other supporters are signing, why this petition is important to them, and share your reason for signing (this will mean a lot to the starter of the petition).

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- [Marty Kaaua](#) 5 hours ago

[I don't believe that a historical land mark should be ruined by those who have done enough to our lands.](#)

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Report

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- [Keahi Noa](#) 6 hours ago

[Development will cause the golf course run off to enter the water, and resort style bungalows is beyond unnecessary when there are already hotels and time shares in the area. Additional development will cause overcrowding and promote inaccessibility for locals.](#)

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Report

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- [Marisa Plemmer](#) 7 hours ago

I am a 1967 graduate of the Kamehameha Schools and I oppose the development because of the guaranteed harm it will cause to Native Hawaiians, residents, and the precious environment.

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Report



• [Clare Io Prissi](#) 9 hours ago

these lands are full of burials and archaeological sites. these lands are hawaiians. the sewage system in this area goes right into the ocean.

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Report



• [Kate Butler](#) 10 hours ago

We do not need any additional development in this beautiful pristine area! It will cause significant damage to the coral reefs, surrounding waters, and land.

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Report



• [MARY HAYDEN](#) 11 hours ago

There are enough big resorts on the islands. We need to preserve the beauty of Hawaii.

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Report



• [Laura Cartwright](#) 21 hours ago

I want to help protect Keahou Bay.

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Report



• [Jill Meyers](#) 1 day ago

I am well aware of the run off in this Bay and I know what development on land means to the ocean....

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Report



• [Ronny Lynn](#) 2 days ago

This is one of those times when the will of the local people should be considered. Over development will degrade the area not improve it!

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Report



• [Marianne Carrell](#) 2 days ago

[Keauhou is perfect as is.](#)

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Report



• [Andrew Carrell](#) 2 days ago

[I live and play at Keauhou Bay, it's pretty perfect as it is, i can't imagine the traffic, disrespect and damage to the area another resort would bring!](#)

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Report



• [Tina Kern](#) 2 days ago

[Tourist accommodations has to stop. There is too much at stake the islands are being destroyed by the amount of people coming here on the daily. Enough is enough. Stop depending on only tourism.](#)

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Report



• [Lisa Lopez](#) 4 days ago

[Please stop building and adding more to areas that need open space...it's too crowded already.](#)

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Report



• [Elizabeth A Goshner](#) 4 days ago

[Want to save Kealakekua Bay from being destroyed by more new developments](#)

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Report



• [Gina Harvey](#) 4 days ago

[It is important to protect small communities and special ecosystems from over development which puts too much strain on these areas.](#)

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Report



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[Kathryn Matlock](#)4 days ago

I live in Keauhou and want to have this beautiful part of Hawaii NOT ruined. Kamehameha Schools lets all of the hillside behind go. It is full of coquis as brush just waiting for a fire! Take care of the land you are already supposed to be RESPONSIBLE for!

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Report



[Kerl Johns](#)5 days ago

The people who live here and pay taxes should come first..Hawaiians should have homes first!!

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Report



[Judy MacDonald](#)5 days ago

Keauhou Bay is a historical site that should be preserved for residents and visitors use.

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Report



[Glonda Jennings](#)1 week ago

9

I have been a visitor to this location and it is perfect just the way it is !

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Report



[Ladislav Szabó](#)1 week ago

To keep Hawaii'i beautiful, and to protect our sea life.

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Report



[Cynril Wong](#)1 week ago

Welina mai kākou, This sacred place is the birthplace of Kauikeaouli, King Kamehameha III longest reigning monarch of Hawaii and should be preserved for generations to come. Please preserve Keauhou! E mālama i kēia 'āina kapu. Mahalo

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Report



[Terri Yoshinaga](#)1 week ago

Problem: Kamehameha Schools wants Keauhou Bay to become a Bungalow Resort. This is a VERY small bay. The Resort will have 105 rooms that means 200+ more people in this

10

small area. This will have serious negative impacts on the bay like more pollution, traffic congestion, negatively affect the endanger species there and more.

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Report



[Ron Dias](#) 1 week ago

[Ron Dias](#)

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Report



[Kathleen Delorme](#) 2 weeks ago

Turning this into a resort will lead to over-crowding, congestion, pollution and environmental and social problems unneeded by the area to flourish and sustain life respectfully!

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Report



[Janet Berketa](#) 2 weeks ago

this project is very environmentally destructive, and bad for our climate.

11

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Report



[Fran Copp](#) 2 weeks ago

The Keauhou Bay should be protected as is bc the island needs to be protected for the recreation of the residents. It would be ruined if that many units for short term rentals were put in such a small place. It would pollute the environment and change the habitat for the animals that live there for the benefit of the golf course. In 10-20 years the place would be trashed. It's a small location not able to handle the traffic, and trash. Government is here to serve the community not promote a business that cause irreparable harm to the people and animals who leave. We don't want it.

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Report



[Karen Kenyon](#) 2 weeks ago

I believe that preserving the bay is absolutely vital — this project does not do this. It will also add to traffic and increase noise for those with condos in the area.

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Report



[Elizabeth Martin](#) 2 weeks ago

12

There is too much development in Kona with no regard for the sacred spaces which are demolished for the GREED of developers. STOP ruining this beautiful sacred island!

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Report



• [patrice rammer2](#) 2 weeks ago

Patrice Rammer

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Report



• [Jennifer Cramer2](#) 2 weeks ago

Jennifer Cramer

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Report



• [annie jay2](#) 2 weeks ago

We need to stop overbuilding and destroying such delicate ecosystems.

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Report



• [Gary Pfah13](#) 3 weeks ago

I want keauhou to remain undeveloped! Leave the area alone to enjoyed by locals and visitors as it is!!

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Report



• [Michelle Melendez3](#) 3 weeks ago

I want to save the bay!

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Report



• [Jennifer Lumd3](#) 3 weeks ago

Enough is enough. Short term financial gain is not worth it. Environmental Impact: Pollution Risk: Developments pollute nearby waters both during and after construction. Endangered Species: Habitat for federally protected green sea turtles and endangered monk seals. Development will threaten these species due to pollution and human disturbance. Golf Course Runoff: Golf course pesticides and fertilizers lead to harmful algae blooms, killing coral and marine life. The removal of the trees that act as a natural filter will allow golf course runoff to pollute the Bay. Increased Human Activity: More tourists and residents will increase noise, water, and light pollution, further disturbing

marine life. Motor Vehicle Pollution: Increased traffic from the resort will lead to more oil and heavy metal runoff into the bay. Noise Pollution: Construction and increased human activity will disrupt marine life, particularly cetaceans. Stormwater Runoff: Development will increase impervious surfaces, leading to higher stormwater runoff and pollution. Sea Foam Toxins: Pollutants in runoff can lead to toxic sea foam, affecting air quality and marine health. Scientific Evidence: NOAA & Other Studies: Developments have always polluted coastal waters, harming marine ecosystems. Coral Reefs: Runoff from developments causes coral bleaching and death, as evidenced in Hawai'i and other coastal areas. Plankton Decline: Pollutants from runoff kill plankton, crucial for manta rays' diet, leading to ecosystem collapse. Algae Blooms: Pollution runoff causes algae blooms, smothering coral reefs and killing marine life. Ecosystem Research: Studies show significant negative impacts on marine ecosystems from development-related runoff.

Legal Concerns: Endangered Species Act: Development violates the act's mandate to conserve habitats for endangered species. Hawaii Conservation Laws: Local statutes require conservation of indigenous aquatic life and their ecosystems. Conservation Mandate: Federal and state laws emphasize conserving ecosystems that support endangered species. Infrastructure Issues: Resource Strain: Big Island already faces water shortages, limited landfill capacity, and power conservation needs. Inadequate Infrastructure: Existing infrastructure cannot support additional strain from a large resort development. Waste Management: Big Island's landfill is nearing capacity, and new developments will exacerbate waste issues. Water Crisis: Ongoing drought and water contamination issues make additional strain from new developments unsustainable. Power Conservation: Big Island is currently experiencing power shortages and rolling blackouts, and new developments will increase demand. Case Studies: Chesapeake Bay: Coastal developments cause significant harm due to runoff, a situation Keauhou Bay could face. Hawaiian Islands: Existing research shows developments lead to severe degradation of coral reefs and marine life. Global Examples: Similar coastal developments worldwide have resulted in long-term environmental damage. Community Impact: Local Use: Keauhou Bay is a popular spot for local activities such as boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. Tourist Impact: Increased tourist activity will further degrade natural resources and disturb local wildlife. Economic Considerations: Tourism Dependence: Manta ray tours and other eco-tourism activities depend on a healthy marine environment. Local Economy: Damage to the bay's ecosystem will negatively affect local businesses reliant on marine tourism. Long-Term Costs: Environmental degradation will lead to long-term economic costs, outweighing short-term development gains.

Conclusion: Long-Term Impact: Allowing the bungalow resort will permanently alter and likely destroy Keauhou Bay's ecosystem. Conservation Priority: Emphasis on conserving the bay as a natural habitat for endangered species and marine life. Community

Responsibility: Urge decision-makers to consider the long-term environmental, economic, and community impacts before approving the development

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Report



Ann Eshabarr 3 weeks ago

This is sacred land. There's enough going on already on the bay so leave it alone. I am very concerned about traffic and more water pollution. This is a terrible idea.

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Report



Yemaya Indira Duby 3 weeks ago

Save this fragile eco-system!!

0  
Report



Ru Carley 3 weeks ago

Very concerned & opposed to more tourist accommodations as we face less and less housing. Greedy developers, enough is enough!

1 . Report



• [Lori Scales](#)3 weeks ago

We do not need, nor want, this kind of development!

0 . Report



• [Anne Yelken](#)3 weeks ago

Sacred land should be protected and kept pristine. Keep the Bay intact with its beauty and historical value. Leave it as it is!

1 . Report



• [marsha stafford](#)3 weeks ago

We do not have the roads nor infrastructure for more development

0 . Report



• [Stéphane Kunick](#)4 weeks ago

Over développement on the island has already lead to destruction of coral reefs and natural ... [Read more](#)

0 . Report



• [Barbara Lossy](#)4 weeks ago

Too much development already.

0 . Report



• [Cathy Costa](#)4 weeks ago

I am signing it because I grew up there and it is our grama land Victoria kamamalu She never [relinquished it](#)

1 . Report



[Lilli Leong](#)4 weeks ago

He ali'i ka 'āina, he kauwā ke kanaka. Stop selling our wahi pana to people who can not possibly understand.

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Report



[ann mooney](#)4 weeks ago

no more development, please.

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Report



[Sherri Bugenhagen](#)4 weeks ago

I believe that this area should be saved from development and let it continue as is... a very scared area! leave it as is!!

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Report



[Veronica Duguran](#)4 weeks ago

We need to keep our beaches and town how it is. How we grew up, where our kids can grow up. We get moving forward but at the same time we need Hawaii to stay Hawaii and not make it look like Oahu.

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Report



[Allison Shapiro](#)4 weeks ago

It's a special and sacred place! Let's protect it.

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Report



[Mary Bradley](#)1 month ago

I love visiting the Big Island because of the vibe. Another big resort development will ruin this place and I'll take my tourist money elsewhere. This island cannot sustain more development. More development makes the rich richer and robs the the people of the island. The environment cannot withstand more development.

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Report



[Jen Bai](#)1 month ago

I have come to this area for years, and it would be travesty to build yet another hotel in a time of global warming and climate change. The Outrigger can barely keep it together! No more big hotels!

0  
Report



Ashlee Johnson 1 month ago

We need natural wild places, not more homes

0  
Report



Jennifer Stabryla 1 month ago

So many people have enjoyed the bay as it is for decades. We appreciate it as a serene spot with access to swimming and paddling and quiet times. I am certain that that will all be taken away by development, and we cannot abide losing this spot and the desecration of a truly sacred space.

0  
Report



Janene Lasswell 1 month ago

This project is not in alliance with the general plan for Hawaii County. County residents need more affordable housing in areas already zoned for residences. County residents need more beach parks for free recreation, for which this bay is zoned, according to the 2045 General Plan. Bishop Estate/KSBE had net assets of 11B (eleven billion) dollars on their 2022 Form 990. Enough is enough.

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Report



Cory Harden 1 month ago

enough hotels already!

0  
Report



Marjorie Erway 1 month ago

It's an inappropriate development for the area.

2  
Report



Louise Page 1 month ago

Far too much of our resources are being destroyed- we MUST save whatever is left. Money has taken us over far too much. Mahalo

1

Report



• [Crista Morones](#)1 month ago

Because its an HISTORICAL SACRED BAY!!!

2

Report



• [Robert Kirkpatrick](#)2 months ago

Have you seen what the manta tours has done to keauhou? It's so overcrowded you can even park! Where the people gonna go? Enough is enough already!

1

Report



• [Vanecia Lourenco](#)2 months ago

I want the Hawaiian culture to stay alive

1

23

Report



• [Haia Wilhovsky](#)2 months ago

Construction of hotels or places for tourists would eliminate the small businesses that are able to provide educational and fun opportunities for those visiting. Lack of tourist education can cause ignorance and destruction of the natural environment that makes Hawaii so beautiful.

0

Report



• [Olivia Payne](#)2 months ago

If I was in the same shoes as the locals I would not want disrespectful people harming the island and treating it as a piece of trash

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Report



• [Aubrey Featherston](#)2 months ago

This is an incredibly beautiful spot and I'd hate to see it get bulldozed over and become inaccessible

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24

Report



Jenn Dant 2 months ago

Coastal development can cause chronic sedimentation, sewage effluent, industrial discharge, changes water flow and run off which can affect coral, contributing to climate change, increasing ocean acidification, and threatening coral reef ecosystems.

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Report



elliott Glover 2 months ago

The bay needs saving

1

Report



Anaya Dorman Mackenzie 2 months ago

Truly a beautiful and sacred site. Seeing the amount of unused property which already exists on the island in and of itself wasteful, but then to add yet more vacation homes to a place which has deep meaning is insensitive and shortsighted. As the description of the petition here says, the beautiful trees along the water and inland are not just a pretty sight, but a vital part of sustaining the bay's ecosystem and have meaning of their own for people who go to the bay. Why would local people, who use this bay so often, want to

see it made into a tourist romping site? The people who are planning to create the vacation homes must not be a part of the community they will be affecting. After everything which has changed on the island, the clear-cutting of rainforest, the destruction of sacred sites, the companies who profit at the expense of people who tend the land, how could Hawaii think of letting this continue? Protecting this special little bay is part of respecting those who have been here all along, and representative of a shift towards thinking beyond short-term money-making. It shows what we want for the future of the island.

0

Report



Max Hollomon 2 months ago

Natural beauty and animals should be protected we see too many get lost to profit

0

Report



Alexandra Saffery 2 months ago

Locals can't even afford the hotels. We need money and development on our schools, roads, hospitals, open space, shoreline access. Not more strain and tourism

0

Report



• [Rick Davis](#) 2 months ago

I live in Holiualoa and paddleboard almost every day in Keauhou Bay. The waters are pristine, filled with life, and uncrowded. I often see manta, dolphin, sea turtles, shark and many other kinds of fish.... Read more

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Report



• [Caroline Marongiu](#) 2 months ago

We don't need this resort. The island needs to stay wild and authentic. Destroying such a beautiful place is disgusting and disrespectful for the land and native.

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Report



• [Virginia Garza](#) 2 months ago

[Virginia garza](#)

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Report



• [Devra Dynes](#) 2 months ago

Big Island has very few beaches to enjoy. Don't want pockets of Honolulu scattered all around Island! Tourism has high costs for all; look what's happened to Kailua??

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Report



• [Mary Burke Monros](#) 2 months ago

There are enough resort type developments on the West side of the Big Island already. Keauhou Bay is much too small and this type of development would destroy the peace and tranquility of the area. There is already a hotel and time share units in the direct vicinity. There is no need for further congestion and destruction of this sacred site.

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Report



• [Machaela Bailey](#) 2 months ago

There is way too much tourism on island yes it brings in money but it also brings car accidents over populating sicknesses like covid and invasive species being brought here enough already there's no more room and it's causing way too many issues for all of us!!!

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Report



[Carolan Cash](#) 2 months ago

No more development. There's a resort already. Enough. Our infrastructure cannot handle more and more.

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Report



[Lorrrie Taylor](#) 2 months ago

No more tourist based development!

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Report



[William Morris](#) 2 months ago

Too much development already. Losing Hawaii identity.

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Report



[sarah.coats](#) 2 months ago

29

[Keauhou Bay is historical sacred land.](#)

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Report



[Big Island Love](#) 3 months ago

We do not need more resorts!

0

Report



[Carrie Lee Hedrick](#) 1 year ago

This bay is beautiful and should not be changed.

0

Report



[Lyn Aclai](#) 1 year ago

It's in an unnecessary location that doesn't allow our community to access the small park and beach. The coastlines on each side are already difficult to get too. This is one of the last places for our picnic gatherings

30

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Report



• [Lucas Felipe](#) 1 year ago

Pelo meio ambiente

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Report



• [Leiana Sine](#) 1 year ago

Enough of our land has been exploited for the continents money

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Report



• [bint easley](#) 1 year ago

Such a small historical place leave it alone

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Report



• [Andrew Roberts](#) 1 year ago

This is a very special spot where you still can canoe paddle and feel like you're still living in Hawaii. Just come down and watch the kids playing in the water and fishing. This is where we locals can still just hang out.

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Report



• [julia pena](#) 1 year ago

There are enough resorts here already. we need more diverse sustainability not resorts. Malama the Aina and the Aina will malama you.

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Report



• [Mary Peaks](#) 1 year ago

The preservation of this areas historical grounds is very important.

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Report



• [Maddy Snyder](#) 1 year ago

There are enough resorts! Save the bay

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Report



• [Mary De Mars](#) 1 year ago

Preserve this beautiful place

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Report



• [Cheryl Shultz](#) 1 year ago

HI go with my mom to watch the water. I can't believe that they want to displace numerous people who live in donor's and also elderly that live close by but think of the local tourism that the Big Island will lose. Fair Winds and hula Kai operate out of the pier why sentence them also I believe there is a script coming but most of they area you want to be bungalows is the set for Baywatch Hawaii why.

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Report



• [Patricia Godfrey](#) 1 year ago

Keauhou Bay is too small for another resort. Kamehameha 3 's birthplace should not just be a plaque in the middle of a resort.

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Report



• [David Pursley](#) 1 year ago

stop colonizing

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Report



• [Betty Beck](#) 1 year ago

No more resorts needed, keep our beach as is.

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Report



• [Wayne Hemby](#) 2 years ago

Overdevelopment should be opposed. Developers are outrunning the infrastructure and drawing too many people into areas that are already stressed. It needs to stop

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Report



• [Joanne A. Martinez](#) 2 years ago

Please we do not need a big resort crowd & tourist bungalows on this sacred birthplace of King Kamehameha 111 to destroy the cultural activities of Native Hawaiians here.

0 .  
Report



• [Janet Scanlan](#) 2 years ago

Kia Hobais should be retained as a harbor, and not turned into yet another resort.

0 .  
Report



• [Gayle Chavez](#) 2 years ago

It is a treasure the way it is!

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Report



• [Anna Nazaryan](#) 2 years ago

Keahou bay needs to be protected. There are enough resorts already on this island.

1 .  
Report



• [Allysha Kahaloa](#) 2 years ago

This is one of the last untouched beaches we have on Hawaii Island. I believe it should stay a sacred place because we already have other resorts and houses in the area. As a native Hawaiian with children, it makes me more appreciative of my sacred land and upbringing

1 .  
Report



• [LISA Cabral](#) 2 years ago

[Lisa N Cabral](#)

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Report



• [Loretta Pedersen](#) 2 years ago

I have been to this beautiful spot, and I remember Victor Llanes from being in Kona many years ago.

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Report



• [cristian younan](#) 2 years ago

This is an important space for locals, and another big resort where all the profit leaves the islands is a huge step in the wrong direction for the state.

1

Report



• [Debbie Wareham](#) 2 years ago

Not every square inch needs to be built on. Aole to construction.

1

Report



• [Valerie Wong](#) 2 years ago

Stop over building. Especially if it's for out of town buyers. Hawaii should ban the sale of real estate to people who don't pay income tax in the State of Hawaii. And charge a large tax to those who already do....and use that money to build affordable housing and care for the homeless, and to fund quality security cameras and "Rapid Deploy System" for all 911 Operators. Keep Hawaii safe and beautiful. Take care of the people and the aina.

1

Report



• [annette otoole](#) 2 years ago

We need to preserve our coastlines, their history, and the wildlife for future generations. there are already too many tourist resorts on the BI. SICK AND TIRED OF GREEDY CORPORATIONS DESTROYING THE AINA. ENOUGH!!!

1

Report



• [gena kenny](#) 2 years ago

please don't develop this sacred land

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Report



• [Noelle Cowell](#) 12 years ago

Supporting

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Report



• [Mikaela Volpicelli](#) 12 years ago

Signing this to support my friend and her family -

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Report



• [Jennifer Mitchell](#) 12 years ago

We don't need any more resorts in Keauhou.

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Report



• [Mallia Miyasato](#) 2 years ago

It is beautiful as is. Why let more of our beaches/bays go to tourist. Why ruin something locals have access to

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Report



• [Ronda Hoxsie](#) 2 years ago

We don't need another resort. Keep the small town residential feeling.

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Report



• [Molly Wallace](#) 2 years ago

Hawaii needs to stay Hawaii - we don't need more resorts pushing the people out of Hawaii.

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Report



• [Madelynn Brown](#) 2 years ago

I am a tourist and saw what the land meant to the locals and I believe is should remain with the locals.

1 . Report



• [Paul Koemigshofer](#) 2 years ago

This historical and sacred place has already become over-used and abused by all the tour/ snorkel companies bringing in hundreds of carloads of tourists each day and night! Shame on the DLNR for issuing permits to these greedy tour companies! More traffic at all hours, more pollution from all the motors in the water, and alot more noise and litter. We don't want yet another poor decision from the planners and government down here! It's already suffering from too many people coming down here every day and night, and now they want to destroy what is left with a huge development and parking lot? You want this beautiful place to turn into Mauiiformia? Save Keauhou! Save our way of life and Aina. Too much tourism is killing Hawai'i. Each year, each decade the important and beautiful spots are vanishing, to become just like any other ordinary place in the World. Don't let this happen! PK

0 . Report



• [bini leasley](#) 2 years ago

Please leave this bay alone it is not big enough to support 100's of tourists enough already

0 . Report



• [Kahoku Benson](#) 2 years ago

Our Aina should stay our Aina!

0 . Report



• [Frank Rom](#) 2 years ago

Worked and lived in Keauhou Bay for 24 years. It is developed enough.....Keep Keauhou country.

0 . Report



• [Kavlen Taomia](#) 2 years ago

Communities should have a say in land use. Preserve the land from non community usage.

0 . Report



[Rebecca Roberts](#) 2 years ago

[This area is already overcrowded.](#)

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Report



• [Jessica Valentine](#) 2 years ago

[Leave it be! Don't need to commercialize every single beautiful place in the world.](#)

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Report



• [Mary E Wilson](#) 2 years ago

[We need to leave some of this island in its pristine condition. K Hoebe is not big enough to support a tourist attraction that they are contemplating on building. Leave Keauhou Bay as it is right now.](#)

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Report



• [Lucia Kaplan](#) 2 years ago

[Keauhou Bay is a special place for native Hawaiians to connect with their cultural heritage. It is already crowded with commercial businesses. It does not need more which only brings tourists crowding the site. I m opposed to more building projects at Keauhou Bay.](#)

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Report



• [Nick Kerridge](#) 2 years ago

[Keep keahou the same & don't change a thing](#)

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Report



• [Marcine McBride](#) 2 years ago

[These developers have no right to obliterate the normal and healthy recreation area already there.](#)

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Report



• [Olga Elkastasy](#) 2 years ago

[I am signing because the land belongs to local people](#)

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Report



• [Robin Aspmann-O'Callaghan](#) 2 years ago

I am signing because these islands are too developed as is and there should be every effort to determine what areas are still relatively close to their natural settings and not just another place for another short term rental.

0

Report



• [Cynthia Luafalemana](#) 2 years ago

Another sold out land for profit!!! When will enough sell out be enough????

0

Report



• [William Wood](#) 2 years ago

I want to save the bay

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Report



• [MadinA.Monarez](#) 2 years ago

Es muy importante!

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Report



• [Nicole Namordi](#) 2 years ago

We need to keep the Aina, AINA!!

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Report



• [Gregory erikson](#) 2 years ago

That would just be tragic!

0

Report



[Dan Lucchesi](#) 2 years ago

More land abuse..... GOP EVIL ROTTEN BASTARDS..... August 6, 2019 Dear Americans, THE PLAGUE Ring around the polls Republicans on their toes Much to disclose Really foes Time to expose..... (published Dec. 1992) I thank the Democrats for all they have done, over the 76 years of my life. We need to speak to the people about Republican hindrance and how they have effected our countries progress and hurt most of our citizens. Starting with, President Obama, we need to inform our citizens: how the Republicans refused to pass Democratic legislation, spell out HOW it affected the country and "we citizens." Every time a congressman or congresswomen speak, have at least 1 example. Unstable 45 should be exposed.. The robber barons have been the Democratic down fall. They are the real enemies! EXPOSE Our Governments self-serving bureaucracy Corporate greed/lack of responsibility Peoples' prejudice/loss of integrity Organized religion, the medical community Scores more, ripping-off humanity America! The land of the free!?  
We need to get coverage on local News channels. Even the fox brainwashed, watch the local News. Save our Country from crimes against all Americans and the Constitution. Continue to fight. Sincerely DRL P.S. Especially the police racist policies. Name the Democratic bills that are being pigeonholed!

0 . Report



[Sondra Olson](#) 2 years ago

I am signing for all the reasons given. Hawaii does not need more commercial ventures. The true beauty & appreciation of Hawaii is in enjoying nature. Please hands-off. In 20 years, so many will be so grateful for that decision in an over-crowded, commercially motivated island that has displaced it's native inhabitants.

0 . Report



[SKve Felidae](#) 2 years ago

Aina over profit. Listen to your hearts not your wallets

0 . Report



[Sahara Lawrence](#) 2 years ago

I love as isi

0 . Report



[Pamela Greenaway](#) 2 years ago

Keauhou Bay can not withstand that level of development.

0 . Report



[Lisa DiNatale](#) 2 years ago

This has been a very special place for me since 1980!

0

Report



[carla baker](#) 2 years ago

We don't need any more peaceful places taken over

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Report



[Alice Finen](#) 2 years ago

I believe we need to protect our sacred spaces. Listen to the voices of the indigenous people. Stop turning every piece of land into something marketable.

0

Report



[Jessica Faustel](#) 2 years ago

Sacred ground should be kept sacred. It provides something that is hard to find in the world

0

Report



[Robert B. Demotta](#) 2 years ago

I was raised there in the early 90's and cant see beautiful Keauhou go to some bungalows! Let's all kokua in keeping Keauhou in its original beauty. I dont even have to explain but if you know, you know!

0

Report



[Nalu Frias](#) 2 years ago

That's where I grew up

0

Report



[Ciari Kealoha-Albarado](#) 2 years ago

fuck colonization

0

Report



Jayden Dougherty2 years ago

This local spot should not be ruined by tourism

0

Report

No

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Report



Karla Garcia2 years ago

This ain't right.

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Report



Kathy Arnold2 years ago

Megan Matthews2 years ago

bc I love my island

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Report

Please keep Hawaii the beautiful, natural place we all look forward to visiting!

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Report



Sherrell Watson2 years ago

Paul Howard2 years ago

Enough with the resorts! Leave Keahou bay as it is for everyone to enjoy.

0

Report



- [Kawalpio Kauahi](#) 2 years ago

We do NOT NEED ANYMORE HOTELS IN RHIS AREA!!

0

Report



- [John Bunnell](#) 2 years ago

This property is an important cultural and recreational resource.

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Report



- [Rosalie Lentz](#) 2 years ago

Keep Kona Country!!!

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Report



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53

[Mercedith Stapp](#) 2 years ago

The developer seems to contradict themselves. in one hand they say there is a feeling of exclusivity with all the athletic and commercial activities that local families cannot enjoy it and on the other hand they want to build a boutique resort for the 1% tourists - so the Bay can be enjoyed exclusively by wealthy tourists?

0

Report



- [dolores burke](#) 2 years ago

Marine ecosystems are extremely fragile, more development along this shoreline is not responsible.

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Report



- [Mark Enomoto](#) 2 years ago

Shame on you Kamehameha Schools!

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Report



- [David Hunt](#) 2 years ago

54

I  KEAUHOU BAY. Please preserve Keauhou's culture and beauty.

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Report



Janice palma-gleennie2 years ago

I've lived in or near keauhou for most of my 40 years in hawaii. The resources of the bay are limited, lovely, and cherished by local residents for all they provide for the health and welfare of we humans and the environment upon which we depend. Creating another exclusive enclave for the rich is far from what is needed to protect Hawaii. Inei from the ravages it's experienced in the past and is experiencing every minute by those who would exploit her.

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Report



Marta Steele2 years ago

I have been here and enjoyed that it was not an over developed exploited tourist destination. I loved the chill vibe and natural beauty

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Report



Angela Mowinski2 years ago

Keep kona beautiful and prestine

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Report



Mark Handy2 years ago

Because Beth Athens asked me too and places like this need to be protected

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Report



Janet Myhre2 years ago

Hawaii should be returned to the natives. They should decide on any changes to their historical sites.

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Report



Janet2 years ago

Leave this sacred space alone...

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Report



• [Anna Anderson](#) 2 years ago

Sounds like a good idea

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Report

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Report



• [Ellen Walton](#) 2 years ago

Keep Hawaiian lands Hawaiian!!!

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Report



• [Christy Tappy](#) 2 years ago

Keahou Bay is a pristine Bay that us largely untouched and enjoyed by locals. Don't destroy this special place.

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Report



• [Marlies Leg](#) 2 years ago

Please remember the Hawaiian people and don't take over every bit of beautiful ocean front. it's their land not ours!

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Report



• [Elizabeth Hartig Burkart](#) 2 years ago

Keep the charm of this end of Alii quiet, peaceful and a place where tourists can come to see what the real Hawaii is like. There are already plenty of rentals/accommodations and areas that cater to the tourist trade on Big Island. Be careful what you wish for....just ask some of the other islands. It's ok to say NO.

1



• [Brooke Torres](#) 2 years ago

I'm signing because my child loves to spend time at the bay swimming and also fishing.

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Report



Sangpagaqita Julian 2 years ago

WE DO NOT NEED MORE HIGH RISE HOTELS. KINGDOM OF HAWAII, OUR PAE AINA, KEEP THE KINGDOM OF HAWAII IN THE HANDS OF THE KANAKA MAOLI

0

Report



Mary Shannon 2 years ago

I am from the Big Island. Our family has enjoyed Keauhou Bay for all our lives. It is beautiful the way it is... no need to build or upgrade. We love it the way it is now.

1

Report



Lisa Diaz 2 years ago

I care about protecting historic Keauhou Bay Ahupua'a ecosystem and our community. New resort development for tourism at the proposed large scale is totally inappropriate for Keauhou Bay. Keauhou Shopping Center has vacant space - they should not build more. Instead- make this area more accessible for our community, families and improve the small beach area making a park & managing trash. Allow the Hawaii County transit Trolley to access the bus stop on Kaleiopapa Street so people can access the bay without a car would improve sustainability and reduce pollution. We need to protect this area for it's cultural, historical and ecosystem - NOT over develop it for tourists and profit!

1

Report



David Russell 2 years ago

We don't need any more development in Hawaii!

0

Report



Dan Greene 2 years ago

To preserve the beauty and health of Keahou bay

1

Report



Denise Smith 2 years ago

STOP THIS MADNESS!!! NO MORE RESORTS!!

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Report



• [Vanessa Lemus](#) 2 years ago

Free Hawaii

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Report



• [Nina Lominario](#) 2 years ago

No more development on our shore lines

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Report



• [Kira Mahoe](#) 2 years ago

I'm signing because this has to stop! We are not the mainland we will never be the mainland. We have more than enough resorts here. 'A'ole!

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Report



• [Christopher Embernate](#) 2 years ago

I don't want to see another resort in our favorite play, R and R places

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Report



• [Leah Aquino](#) 2 years ago

Enough already.

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Report



• [Annabel Distefano](#) 2 years ago

ENOUGH ALREADY! NO MORE DEVELOPEMENT AT KEAUHOU BAY! WE NEED TO PRESERVE WHAT'S LEFT OF THIS PRECIOUS, SACRED LAND!

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Report



• [Kayla Wolf](#) 2 years ago

This needs to stay as is. No changes please.

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Report



- [Karen Foster](#)2 years ago

Leave it alone! Stop being greedy!

0

Report



- [Edward Malinowski](#)2 years ago

At some point you have to think about when enough development is enough. Nothing will be gained by developing this area except additional exploitation of people and culture that has been exploited enough.

0

Report



- [Leina Wolcott](#)2 years ago

Please let Keauhou be! It's already suffered from pollution

0

Report



- [Don Nosler](#)2 years ago

I lived in Kona for almost 7 years and spent a lot of time snorkeling playing cards and partying on that beach. So many great memories. Keep it the way it is please...

0

Report



- [Lydia Hooser](#)2 years ago

Keep Keauhou Bay the way it for our residents and our community

0

Report



- [Peter Fitch](#)2 years ago

Let's keep this area of old Hawaii as is. Enough with the development. Have we learned nothing?

0

Report



[Jeanie Johnson](#) 2 years ago

It is a sacred place. One of the last to preserve amid the surrounding commercialization and destruction.

0 .  
Report



• [Sue Haas](#) 2 years ago

[Protect the bay!](#)

0 .  
Report



• [Stacey Bongiorno](#) 2 years ago

It would be a shame to lose Keahou Bay it should remain as is.

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Report



• [Toni Devaux](#) 2 years ago

[I want to preserve the historical Keauhou bay](#)

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Report



• [Jane Taylor](#) 2 years ago

[This is well written and I agree, especially about the road, however I believe the comment period is over and I hope some were signed in time!](#)

0 .  
Report



• [Gav Graham](#) 2 years ago

[I have seen far too many developments of this nature on Kauai and how severely they have impacted the historical, cultural and uniqueness that is Hawaiian. I hope that this petition and those preserving Hawaii's integrity are successful.](#)

0 .  
Report



• [Lori Bradford](#) 2 years ago

[I care!](#)

0 .

Report



- [Promise Roback](#) 2 years ago

It's meant for the public and everywhere is being taken over. It should be public since the pier is right there. They also have group gatherings there to learn about the history. Outsides should stop trying to take native peoples land.

0

Report



- [Leinaala Gonsales](#) 2 years ago

Hawaii belongs to the natives.

0

Report



- [Tiara Makato](#) 2 years ago

I don't want this turned into a resort..

0

Report



- [Paula Williams](#) 2 years ago

Native Hawaiian sites must be preserved.

0

Report



- [Lawrence Manguil](#) 2 years ago

I was born and raised here in Kona from baby time we need place to eat go play and be free from all Buildings ~~like~~ ~~like~~ ~~like~~.

0

Report



- [Anthony Marvin](#) 2 years ago

I live on island and I constantly watch as locations I went to as a kid being turned into resorts or theist hot spots, it's sad because it's slowly pushing out the locals and removing areas that we can bring our own children

0

Report



• [Brittney Kainoa](#) 2 years ago

This should not happen

0

Report



• [J Mulloy](#) 2 years ago

You want to live in a places that has tourists, but you don't want to live in a tourist town.

0

Report



• [Barbara Underwood](#) 2 years ago

Many reasons!!!! Don't build this!!

0

Report



• [Margaret Parsons](#) 2 years ago

Resorts are the antithesis if everything I love about the Big Island.

2

Report



• [Taylor Bear](#) 2 years ago

fuck the gentrification of our A'ina

2

Report



• [Tevita Lavaika](#) 2 years ago

It's been a an amazing outlet for youth to stay out of trouble, stay fit, and have fun. I've had some amazing memories there and it would be a shame to lose such an amazing place near to me.

1

Report



• [Ashli-Nikol Alley](#) 2 years ago

This is my home.

0

Report



• [Nick Correa](#) 2 years ago

Keauhou is a local hang out not a tourist attraction. Too many favorite local beaches are getting turned into this and it needs to fuckin stop.

1

Report



• [Desiallee Cabalar](#) 2 years ago

All of the local spots are being blocked off by gates or homes with gated communities. This is not fair the local who were born and raised here should not be locked out of their own land just because greed and money. We have something the rich want until they fully pollute and destroy it and then they no longer want it. Hawaii/ Big island is known to a lot of tourist as the relaxing island. I do not have a problem with tourist but when you buy here on this island as a vacation home now your crowding the island so eventually it will be like Oahu where no one really thinks of it as a vacation spot. Just come stay the week and go home. We have many many hotels and condos that can't be full all year round. Support those places that are already built.

0

Report



• [Lisa Suttles](#) 2 years ago

Kahona is paradise and should stay as such

0

Report



• [James Ellis](#) 2 years ago

The big island is getting crowded enough with another resort.

0

Report



• [Sean Doolley](#) 2 years ago

There are enough beach resorts, where can the residents go when they all become resorts.

0

Report



• [Renee Shove](#) 2 years ago

This would make me so very sad. Why do rich people feel like they need to take everything away from us and give it to the tourists?? What a shame.

0  
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Report



• [Daven Haaliloa](#) 2 years ago

This is my home and I don't know why you would touch an area that's been fine since forever.

0  
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Report



• [Malle Zablan](#) 2 years ago

Strictly against! Thank you, Malle Zablan

0  
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Report



• [Laurie Decasa](#) 2 years ago

Stop!!

0  
.  
Report



• [Mariana Gloor](#) 2 years ago

We don't need another resort!

0  
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Report



• [Sandy Jilton](#) 2 years ago

I was a resident on Hawaii Island for 12 years. I honor the history of this historic place and the natural beauty that only it can offer. The tourism industry will destroy this area if more accommodations are constructed. Honor this place.

0  
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Report



• [Kelly Sorenson](#) 2 years ago

I lived there and I care.

0  
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Report



•

[Laurie Teitelbaum](#) 2 years ago

I love the place to congratulate with friends. I feel that we need to keep it available for all of hawaiian residents to congregate. Please keep it for our children.

0

Report



[Cindy Holton](#) 2 years ago

Maintain local traditions and protect waterfront beaches!

0

Report



[Lori Watson](#) 2 years ago

Save the historical areas before it's gone.

0

Report



[Ginnvto Minamishin](#) 2 years ago

This is King Kamehameha the third birth place and hold significant historical and sacred mana to the island of Hawaii. There is no more need to take and replace what is already

there !!!! This piece of Hawaii, that still is used by keaouhou canoe club and and an area for little family gathering, such as Picnics and paddle boarding. Not to mention the boat ramp for fisherman and fishing grounds around the area. This place is well taken care of by the locals of the big island and hold significant Hawaiian history!!! We don't need any more hotels, condos, homes on this beach front property. It is a respectable play ground for our children and adults as well from land to water. Please save hawaii and our sacred land and history from being over built for greed and control.

0

Report



[Kauliahoolai Piliaga](#) 2 years ago

The resort on Keahou point is way more than enough. The entire Alii drive is hotels, resorts, condos, vacation rentals, and multimillion dollar properties. Why must our community always conform to the greedy desires for people to exploit Hawaii. When you build stuff like this, the area that we all grew up in and have cherished memories in turns into a sad perversion of what it once was.

0

Report



[Julie Steimbach](#) 2 years ago

I love this island because it's not over crowded and all resorts. We love it the way it is.

0

Report



• [Ana Tuppelin](#) 2 years ago

The ocean is a sacred place, especially keahou bay. The increase of tourism in that area will be detrimental to marine life, especially the manta rays that reside in that area.

0

Report



• [Jasmin McCracken](#) 2 years ago

Just wrong.... no. please don't pave paradise to put up a parking lot. There is PLENTY of places for tourists to stay already. Too many.

0

Report



• [Ellie Tyler](#) 2 years ago

Keep Hawaii the way it is!

0

Report



•

[Matthew Kerr](#) 2 years ago

Why ruin a good thing?

0

Report



• [Vickie Pruitt](#) 2 years ago

We already have way too many resorts on this island. This island will end up just like the rest, overcrowded with tourists.

0

Report



• [Paul Daadag](#) 2 years ago

30 + resident of the Kealahou/Keauhou ahupua'a and have witnessed the influx of traffic on both Alii and Hwy 19 roads. Adding another resort will only add more congestion to a problem of poor infrastructure.

0

Report



• [Rochelle Morais](#) 2 years ago

This is a beautiful bay that should be protected and not be overrun by a resort

0 .  
Report



• [Stephen Dossey](#) 2 years ago

Aloha aina keep Kona country

0 .  
Report



• [Kimberly Kekina](#) 2 years ago

We don't need another resort.

0 .  
Report



• [cathy costa](#) 2 years ago

This is our history and culture No desecration

0 .  
Report



• [braxston bailey](#) 2 years ago

Stop the Building!

0 .  
Report



• [Paul Dagdag](#) 2 years ago

The place is already crowded. We need better roads and alternative routes before more development is built.

0 .  
Report



• [Paula Goleta](#) 2 years ago

I'm an outrigger paddler and enjoy the sport. This club lent us canoes to race in Hawaii.

0 .  
Report



• [Michele Vinz](#) 2 years ago

We need to preserve more land on the islands.

0

Report



• Edwin Gaspar2 years ago

The area is Historical we dont need any more hotels let alone more people moving here and squeezing out local people native to Hawaii.

0

Report



• Katie Lynn2 years ago

Keauhou Bay is a precious and sacred place. It deserves to stay that way. The focus should be on housing solutions for residents (in appropriate areas) and land stewardship. Not more resorts destroying the natural and historical sites.

0

Report



• Brooke Morrow2 years ago

No more building

0

Report



• Luis Pagan2 years ago

Koloha

0

Report



• Alexis MacLeod2 years ago

I'm signing because there are not enough unspoiled places left in the world.

0

Report



• Alex Duilam2 years ago

I play volleyball down here on the weekends and I don't want to lose something that makes me happy

1

Report



• [Kandle Kata](#) 2 years ago

I love Hawaii, not developing every square inch

1

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Report



• [Katie McKillop](#) 2 years ago

Please keep Keahou just as it is. This is a historical area that needs to be kept natural with care. Aloha.

0

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Report



• [Maille Silva](#) 2 years ago

This place is an amazing place that we love and don't want it gone

1

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Report



• [MYsterv-Lynn Freitas](#) 2 years ago

Hawaii needs more HOUSING for Hawaiians before we desecrate more land to serve tourists who don't live here. We need to preserve the land and beach space and act as stewards of the land - not pave over paradise and put up more parking lots.

0

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Report



• [Kylee-Anne Kiha](#) 2 years ago

I'm signing because we have so much resorts! Not only do we have so much resorts but there is so much history behind keahou and putting a resort there would just the defeat the purpose of why keahou bay is there and why it's so important

0

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Report



• [Marquesa Calderon](#) 2 years ago

Respect the locals!!

0

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Report



• [Gabrielle Provencher](#) 2 years ago

This is a sacred place for the Hawaiian people that should be left alone and not developed.

1

Share  
Tweet  
Report



David Locke2 years ago

Enuf! Don't turn this place into a Joni Mitchell song.

0

Report



Jordan Bever2 years ago

Resorts are gross

1

Report



Heather Harvey2 years ago

This is my favorite local spot to still swim, boat, and surf. If we over populate it, it will kill off the local wildlife and human life. Please stop killing the coral. and liveliness. It's the first place I ever played volleyball on the island. Its where I go to meditate and swim in clean water. Away from the tourist . . .

5

Share  
Tweet  
Report



Teddy Alejandro2 years ago

Stop corporations.

0

Report



Rachel Curnel Struemp2 years ago

Save our beach! Please don't develop it!

0

Report



Joseph Lardin2 years ago

I've paddle there for so long you can't just take that down

0

Report



• [Lakin Ferris](#) 2 years ago

We don't need another resort on this island. That's a significant tourist and local spot where plenty people go to have fun. Putting a resort there would ruin it.

0

Report



• [Robin Akau](#) 2 years ago

I believe there should be recreational spaces in our community.

1

Report



• [Carolina Medina](#) 2 years ago

Please sign. When is enough going to be ENOUGH!??

1

Report



• [Aka 0022](#) years ago

I love this court! would be a shame to get rid of it.... one of the very few nice beach courts on the kona side.

0

Report



• [Aaron Lanuza](#) 2 years ago

This is a wonderful space for volleyball and beach time with my family

0

Report



• [Jasper Felipe](#) 2 years ago

volleyball

0

Report



• [LaVerne Curry](#) 2 years ago

We have enough developments. We need places for our local residents to gather and enjoy our Aina. We need to keep the volleyball courts and the canoe hale for locals.

1 .  
Report



• [Elisha Vieira](#) 2 years ago

I want to keep keauhou bay the way it is and all it's artifacts

1 .  
Report



• [Matthew Idom](#) 2 years ago

There's no need for a resort, it's only greed.

1 .  
Report



• [Frida Marie](#) 2 years ago

I NEED TO AND THATS NOT OKAY TO DO I

1 .  
Report



• [Evan Curry](#) 2 years ago

I have lived here all my Life we can not let our island get over run with this kind of stuff.  
How about tear down the condos and buiid more volleyball courts

1 .  
Report



• [Davin Long](#) 2 years ago

I really don't want it to go I love the volleyball court and another resort hell nah!

2 .  
Report



• [Teah Van Bergen](#) 2 years ago

This land belongs to the people

1 .  
Report



• [Linda Mutcb](#) 2 years ago

Appalling plan for this land. We have more than enough resort developments. Please show respect and keep Keauhou Bay sacred and peaceful.

1 . Report



• [Ann nichols2](#) years ago

This is a terrible idea for this historic area creating traffic, congestion and ruining community character. Owner at Kanaloa at Kona.

0 . Report



• [Francis Hoque2](#) years ago

Historical! Leave it alone

1 . Report



• [Vivianmalia Faagata2](#) years ago

Ancestral connection

1 . Report



• [Beverly Connolly2](#) years ago

I've experienced this sacred park & beach and see the history and benefit of it being easily available for locals and visitors alike. Over developing is a fine line and a new proposal of additional resort dwellings would be a tipping point for preserving access to this space. Please consider this pocket to be important enough to protect

1 . Report



• [Mary E Wilson2](#) years ago

Development of these beautiful bays and coastlines has to stop! It's ruining the ecosystems of the ocean

2 . Report



• [Leslie Rae Schmitz2](#) years ago

This development is completely unnecessary and will do no good only harm. The existing hotel Outrigger sits half empty and the Keauhou Shopping center commercial space is mostly vacant. The traffic corridor will be hugely disruptive. This cannot be built.

1

Report



[Trina Alapai](#) 2 years ago

Enough is enough!!! Listen to the Hawaiian people and do right by them. Respect. 🙏

2

Report



[Darlene Dabelling](#) 2 years ago

Please keep Keauhou Bay the way it is. PLEASE PRESERVE. Please respect Hawaii and not give to greedy people who care not about us.

1

Report



[ANTHONY RODRIGUES](#) 2 years ago

These are luxury condos. A bungalow is a single level unit. Why don't they build it at the former Keauhou Beach Hotel? Or Kona Lagoon. No major development should be allowed till the Alii Highway is installed.

0

Report



[Janie Workman](#) 2 years ago

Keeping ancient Hawaiian culture is important!

1

Report



[Linda Ronske](#) 2 years ago

Save this beautiful historic site. Build your bungalows somewhere else. This public site will then become off limits to everyone but the rich living there.

0

Report



[Demi Alley](#) 2 years ago

This is a sacred area and not big enough for more tourism. Respect the Āina and the folks living here. A'ole development!

0

Report



• [Diane Neuman](#)2 years ago

This is outrageous. There are plenty of resorts already.

0 .

Report



• [Jeanne Alford](#)2 years ago

We need to protect and embrace these sacred, neighborhood places and not allow big money and commercial developments to come in and destroy them.

0 .

Report



• [Makani Kaaua](#)2 years ago

Enough development for visitors use.

0 .

Report



• [gretel.bates](#)2 years ago

This is sacred land. Get yer paws off it!

0 .

Report



• [Jeanne Roberts](#)2 years ago

Kam Schools Capital has a monopoly on bays and access in Keaouhou and a pattern of taking away access from the community. Look at what they have done to Heeia Bay!

0 .

Report



• [Deby Quandt](#)2 years ago

Another resort is not needed, this peaceful place is needed.

0 .

Report



• [Susie Cysewski](#)2 years ago

That area needs to stay natural. Enough condos and shops already in Keaouhou. Use the money to help Naive Hawaiians build homes.

0 .  
Report



• [Deborah Heum](#) 2 years ago

We have enough big resorts don't take away another bay

0 .  
Report



• [Christine Tucci](#) 2 years ago

We vacation there

0 .  
Report



• [Patti Donohue](#) 2 years ago

I want to save this area from further development.

0 .  
Report



• [Sheila Braithwaite](#) 2 years ago

Because I have lived on a barrier island that was ridiculously over built causing all kinds of traffic issues and environmental trauma to the National Park it abutted. Spaces like this are so important for residents and guests. Celebrate it...don't destroy it.

0 .  
Report



• [Pamela Welden](#) 2 years ago

There is already an Outrigger Resort there. It needs renovation and reopening of its restaurant venues - that's plenty for that small little bay.

1 .  
Report



• [siobhan roadway](#) 2 years ago

WTF!

0 .  
Report



[Sabrauna Hedenberg](#) 2 years ago

KEEP HAWAII IN HAWAIIAN HANDS

5

Report



[Caleb Hoffman](#) 2 years ago

Keep Hawaii's natural beauty!

1

Report



[Rhys Ward](#) 2 years ago

I grew up there and don't want to see it change in a negative way.

0

Report



[Austin Llanes](#) 2 years ago

To much buildings

1

Report



[Sarah Kamanu](#) 2 years ago

Keaouhou bay already has a perfect balance of visitors and locals. There is no space for yet another resort of any kind to be built! The harbor is small, it is already maxed out on tourists, boats and humans

6

Report



[Janis Prinslow](#) 2 years ago

I'm signing because there aren't any places left on the Kona side of the island that aren't overcrowded!

0

Report



[Janis Prinslow](#) 2 years ago

I'm signing because nobody should be developing on a bay front with waters rising, and no place else to go that's not overcrowded!

0

Report



• [Thomas Pinkert](#) 2 years ago

Let's get more affordable housing for local people instead.

1

Report



• [Eliza Willie](#) 2 years ago

This area does not have the infrastructure to support more development and run off into the bay will further compromise the reef and water quality.

2

Report



• [Esther Quam](#) 2 years ago

This bay needs to be left just the way it is. It's one of our only playing grounds left for the local people of and our keikis to enjoyed without all the mainland humbug , and crowds.. There going to destroy the ocean. Leave it be!!!!

1

101

0

Report



• [Debbie Hecht](#) 2 years ago

Keep Keahou Bay accessible. The cess pools along the north side need to be replaced by sewers.

0

Report



• [Barbara Celesio](#) 2 years ago

The Keahou Bay Area is a favorite area for locals and has been for years. The many activities that occur regularly begin and end there. Making unneeded changes would spoil its existence, not to mention robbing those who continue to honor Hawaiian legacy.

9

Report



• [Asha Keddy](#) 2 years ago

I want to preserve the beauty and history for all

0

Report

102



Joshua Pickering 2 years ago

Keep Keahou Bay natural!

0

Report



Valerie Vaughan 2 years ago

Not every beautiful bay needs a resort ❤️

1

Report



Deeson patterson 2 years ago

It's good

0

Report



Tyler Wood 2 years ago

My brother and I grew up there. I still come back when I go see my family. It's been through (and is going through) enough tourist abuse. Leave it be.

0

Report



Kathy Roney 2 years ago

In my lifetime, I've witnessed Oahu go from a peaceful tropical oasis to an overpopulated tourist site. Allowing this development will take away why many of us chose to live on Hawaii Island and at Keahou Bay. We don't always need to cater to the tourist and greed. Malama `Aina!

8

Report



Sally Rankin 2 years ago

When is enough... enough?! Kamehameha Schools claims to be ashamed of how they have managed the `aina at the bay, but this plan clearly proves they have no shame when it comes to properties they consider financially underachieving, no matter the cost.

4

Report



nathan percifield 2 years ago

[Keauhou Bay](#) i sacred

1

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[Report](#)



[Bryan Gazau](#) 2 years ago

Less is more. keep the beaches cleaner save water sacred beaches keep sacred

2

[Share](#)  
[Tweet](#)

[Report](#)



[sharon williford](#) 2 years ago

A sacred place for the local people!!! Don't OverDevelop Kona !!!!

5

[Share](#)  
[Tweet](#)

[Report](#)



[Jacque Green](#) 2 years ago

I am handicapped and elderly.. I can't get in the water where there is waves. This is one of the few places I can go! ❤️

5

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[Tweet](#)

[Report](#)

- 3 comments were added to the list



[Erin Hamat](#) 2 years ago

My brother's and grandmother's ashes are in this bay. I go here to be with them. If they build a resort here how can I? Plus I paddled for Keauhou canoe club. Where will they paddle? I am strongly against this! No no no!!!!

7

[Share](#)  
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[Report](#)



[Mike Dennis](#) 2 years ago

I love Keauhou Bay and raised my kids there. I have paddled there for almost 30 years. It's a treasure.

1

[Share](#)  
[Tweet](#)

[Report](#)



Amanda Nixon 2 years ago

Keauhou does not need and cannot handle more condos or resorts. No no no to more development on our already fragile over crowded coast.

5

Share  
Tweet

**From:** Lamaki Mikahala Roy <[REDACTED]>  
**Sent:** Monday, August 5, 2024 2:01 PM  
**To:** 221053-01 KS Keauhou Entitlements  
**Subject:** Halau No'eau Kahelemauna: Akua's Guidance for Keauhou and all of Ka Pu'u o Kalaauakalani

**Categories:** Yellow Category

**To:** Kawika McKeague, AICP Principal  
[REDACTED]  
[REDACTED]

**From:** HRM Ka'iomana 'ulao'kalaniki'eki'eloakeahi'ena'enamauokalaulani  
**Subject:** Halau No'eau Kahelemauna  
[REDACTED]  
[REDACTED]

**From:** HRM Ka'iomana 'ulao'kalaniki'eki'eloakeahi'ena'enamauokalaulani  
**Subject:** Halau No'eau Kahelemauna  
[REDACTED]  
[REDACTED]

**From:** HRM Ka'iomana 'ulao'kalaniki'eki'eloakeahi'ena'enamauokalaulani  
**Subject:** Halau No'eau Kahelemauna  
[REDACTED]  
[REDACTED]

By Akua there is to be no new development in Ka 'Aina Kapu Kanahā. There are to be no disturbances to Pu'u o Kaluaokalani; no new construction or building of dwellings. Akua calls for the appreciation and obedience of all expressions of the Ancestors of 'Ōiwi and Divine Servants of the Ancestors.

Hālau No'eau Kahelemauna now here presents KS KBMP with a proposal that follows the guidance of Akua that has been received pertinent to the greatest care of Pu'u o Kaluaokalani.

**By Akua has come the declaration that Kamakahonu now includes all of the sacred lands of Pu'u o Kaluaokalani.**

The Capital of the Restored Kingdom of Hawai'i and the First Home of Kamakahonu is Hālau No'eau Kahelemauna.

Plans by the Royal Family of the Restored Kingdom of Hawai'i include plans to purchase the lands that began as a lease of Ali'i David K. Roy, Jr. and Ali'iwahine Verda L. Vida - Roy spoken of by the Ancestors of 'Ōiwi. Obedience to Akua lays the planning for all activity to take place. A full Restoration of the First Home of Kamakahonu is planned. Obedience to Akua lays the planning for the planting of the Garden Mala'ai Piihonua where all of the first plants of Kaluaokalani are to be planted. Obedience to Akua lays the planning for the loving and nurturing of holoholona here for outcomes of lives in peace and harmony. This is the restored vibration of Kaluaokalani. The first holoholona are to be pua'a (pigs), moa (chickens), kao (goats).

2

At Hālau No'eau Kahelemauna, the Divine Work of Inquiry with Akua continues for the abiding success of the care of all of Pu'u o Kaluaokalani beginning with the Divine Guidance for the success of the care of Keauhou Bay. Other successes underway include the safekeeping by PONC purchase 68.84 acres; the lands identified as TAX MAP KEYS: 7- 6- 021: 016 AND 017, SITUATED IN HOLUALOA, DISTRICT OF NORTH KONA.

Ongoing Divine Inquiry at Hālau No'eau Kahelemauna will bring forth success for all planning at Keauhou. The strongest collaboration is anticipated of Guidance Teams for Kamehameha Schools and Guidance Teams serving Divine Ones of Hālau No'eau Kahelemauna for the Restored Kingdom of Hawai'i for complete success. Presently there is a request for collaboration to start immediately. Presently, here is a request that I meet in Kona with KSBE and Group 70 representatives as soon as possible. The outcomes of this collaboration can mean the gathering of immediate support from the Kona and Hawai'i communities. Economic development for KSBE will soon be proven as success follows Akua's planning.

This collaboration also lays the strongest foundation for the success of Kamehameha Schools Bernice Pauahi Bishop Estate to continue to be the conduit of verification that Bernice Pauahi Bishop, by founding the Kamehameha Schools, intended to establish institutions that would be of lasting benefit to her country; and to honor the name of Kamehameha-The-Great. This collaboration will ensure success in the understanding of the first faith of Hawai'i and the origins of 'Ōiwi. This collaboration will ensure the success of 'Ōiwi to know their past for success in their futures. This collaboration will support the intention for fullest success by Akua for all involved.

Collaboration of Guidance Teams also include the planning for the identification of all of the best supporters of the Kingdom, workers in Kamehameha Schools and all public workers known and yet to be discovered by best collaborations.

The following Kaouha o Ke Akua (Instructions of Akua) provide all 'Ōiwi and all mankind with understanding:

**BE IT KNOWN**

3

The Ancestors of 'Ōiwi teach all on Earth that Ahu'ena Heiau is the First Temple of Spiritual Worship built by mankind on the planet. Ahu'ena Heiau was built by the Firstborn of Akua, ka 'Ōiwi.

In 1975, Ahu'ena Heiau was restored by 'Ōiwi led by Ali'i & Kahu David Keli'ihelemauna Roy, Jr. -- the Restorer of Ahu'ena Heiau. In gratitude to Akua, in commemoration of the great progress made for 'Ōiwi and mankind by the restoration of Ahu'ena Heiau, the 'Aha'aina Kumu Pono (Gathering for True Foundations), the community feast, was held at Kamakahonu.

The Kaouha Ka Māmaka o Ka Lama was declared following the passing of Ali'iwahine Verda Leialoha Vida-Roy. This Spiritual Order declares that based upon the Lives and Service of Ali'i David Keli'ihelemauna Roy, Jr. and Ali'iwahine Verda Leialoha Vida-Roy, from this time forward there are Two Positions of Responsibility to Akua for Ahu'ena Heiau; One for the Male or the Kahu and the Second, for the Female; Divine Servant of Akua and Helpmeet of the Kahu. This is now Spiritual Law at Kamakahonu in Hawai'i for the Earth. Ola ke Kaouha Ka Māmaka o Ka Lama which means: The Divine Order of the Two Steadfast Ones Who Uphold the Highest Light of Akua at Kamakahonu. This Law of Spirit Lives.

Here is the guidance of Akua. The King is chosen as Kahu of Ahu'ena Heiau. In equal responsibility as Kahu of Ahu'ena Heiau is Lamakū and Kahunanui of Ahu'ena Heiau Mikahala Roy from now on to be known by her Royal Name of HRM Queen Ka 'I o-mana'ula-o-ka-lani-ki'eki'e-loa-ke-ahi'-ena-'ena-mau-o-ka-lau-lani by proclamation of the Ancestors of 'Ōiwi for Akua and the King Ali'i Nui Mō'ī Edmund K. Pākī - Silva, II, respectively. By order of Akua, Kamakahonu is upheld as the Restored Kingdom of Hawai'i by King Ali'i Nui Mō'ī, Edmund K. Pākī - Silva, II Kahu, Ahu'ena Heiau. Kamakahonu is the Restored Capital and First Capital of the Kingdom of Hawai'i by Ka Na'i Aupuni, King Kamehameha-the-Great the Conqueror of the Islands.

Ahu'ena Heiau is now the Home and Anchor for the Life of the Restored Kingdom of Hawai'i by Hawai'i's King Ali'i Nui Mō'ī Edmund K. Pākī - Silva, II. Ahu'ena Heiau remains the Holy First Temple of service to all mankind including those individuals who wish to remain U.S. citizens. Here expresses a condition, provided by Akua, that will provide peace and continued service to mankind and all life on the planet.

## He 'Oia'i'o Nō Truth Indeed

### May, 2018 Words of Light of the Ancestors of 'Ōiwi

Hālau No'eau Kahелеmauna  
House of Wisdom of the Mountain-Roaming-Chief

Hālau No'eau Kahелеmauna is the location where 'Ōiwi (Pacific Natives) and all of mankind may learn of the Age of Light (Ke-au-lama) and be taught of Akua's (Divine Creator's) prescription for their healing.

**IN THE AGE OF LIGHT, AKUA PROMISES TO HEAL THE PLANET  
AND ALL LIFE UPON THE PLANET.**

By learning the cosmology of the first faith of 'Ōiwi in the Pacific, Divine Creator intends to heal the planet and all life upon the planet. Hālau No'eau Kahелеmauna will be the first and key location in Hawai'i to teach others from other world centers the way to derive and to learn healing by Akua.

The vision unfolds by the restoration of the Garden named Māla'ai Pilihonua (Garden Beloved by the Earth) wherein all of the first plants of Kaluaokalani (the Second Heaven) and an ancient name for Hawai'i will be planted, loved and nurtured.

The holoholona (animals) that dwell here will be loved and nurtured by humans for an outcome of lives in peace and harmony. This is the restored rhythm and vibration of Kaluaokalani.

Lamakū Mikahala Roy  
Divine Conveyance May, 2018  
Hālau No'eau Kahелеmauna



healing by Akua.

Akua requires the land lease begun with the restorer of Ahu'ena Heiau, Kahu David Keji'helemauna Roy, Jr and his wife Verda Leialoha Roy be purchased from Kamehameha Schools / Bishop Estate by the One who inherits the purposes and authority of the station of Kahu as the Divine Servant of the Royal and Sacred Temple of the Hawaiian Islands and of the Ancestors of Hawaii under Ke Akua Manamana Loa, Divine Creator.

The conviction to hold all lands that are a part of the Bernice Pauahi Bishop Estate holds the virtue extending from the heart of Ka Mō'i Kamehameha the Great. He is among those here who convey to you these Words of Light upon the Path of Light of the Ancestors of 'Ōiwi.

The present Trustees of the Bishop Estate are asked to hear and grant this request of Akua by the Ancestors of 'Ōiwi. To do so will be the sound and virtuous act that demonstrates their true continuing prayer, ka mihi, begun by Trustees of Bishop Estate who gathered at Kahalu'u in ceremony asking forgiveness of Akua for acts upon the lands of Kahalu'u, the same ahupua'a where Hālau No'eau Kahelemauna is to be begun.

Lamākū Mikahala Roy  
[Redacted]  
[Redacted]  
[Redacted]

## August 21, 2018 Words of Light of the Ancestors of 'Ōiwi

The lands of Kamakahonu and the lands surrounding Kamakahonu, First Capital of the Kingdom of Hawaii united by Ka Mō'i Kalaninuiwai'ekunuiākea Kamehameha I, are laden with the wealth of life of the Divine Spirit of Akua Manamana, most High Divine Creator; Ka 'Ī-lā-lā-ōle, The-Supreme-One-Without-Branches. We wish to impart to all 'Ōiwi the Divine History of this area, the entire north Kona coastline, especially the lands from Kamakahonu through Hōlualoa through Kahalu'u and Keauhou. Here are lands of the heart of Kaluaokalani (The Second Heaven). We are set to accomplish this by teaching this Divine Content to Lamākū Mikahala Roy, Kahu of Ahu'ena Heiau.

Where the lands surrounding the First Capital are to be considered the Heartland, Mauna a Wākea is considered the pinnacle and beacon of Kaluaokalani. Mauna a Wākea is the Great Altar to Akua that beckons unto itself its similar essence and vibration that is P-E-A-C-E. This is the peaceful vibration of all the lands of Kaluaokalani that, over time, became known as Hawai'i and the Pacific Isles of the sea.

'Ōiwi are Akua's precious Firstborn ~ Ka Hiapo that helped Akua lay the tracks for what became all faiths of the Earth.

The motherland sank into the sea leaving her remnants that still call forth the essence of life of like nature -- PEACE.

The Age of Light, Keaulama, for the planet has dawned and begun in Hawai'i of the Pacific for the life, healing and hope for the planet and all of humanity.

**IN THE AGE OF LIGHT, AKUA PROMISES TO HEAL THE PLANET AND ALL LIFE UPON THE PLANET.**

By learning the cosmology of the first faith of 'Ōiwi in the Pacific, Divine Creator intends to heal the planet and all life upon the planet.

Hālau No'eau Kahelemauna will be the first and key location in Hawai'i to teach others from other world centers the way to derive and to learn

**From:** Lamakū Mikahala Roy <[REDACTED]>  
**Sent:** Monday, August 5, 2024 2:20 PM  
**To:** 221053-01 KS, Keauhou Entitlements  
**Subject:** 'Imi i ke Akua i ke kūlana pūlama iā Pu'u o Kaluaokalani (He Mele 'Ala'apapa)

**Categories:** Yellow Category

**TO:**  
**Kawika McKeague**  
[REDACTED]  
[REDACTED]  
**Kamehameha Schools - Keauhou Bay Management Plan**  
**Draft Environmental Impact Statement (DEIS)**

**From:**  
**HRM Ka'iomana 'ulaokalaniki'eki'eloakeahi'ena'enamaokalaulani**  
**Halau No'eau Kahelemauna**  
[REDACTED]  
**Lamakū.** [REDACTED]



**Ka'iwakīlomoku**

**Bernice Pauahi Bishop Heritage Center**

*Bernice Pauahi Bishop, by founding the Kamehameha Schools, intended to establish institutions that should be of lasting benefit to her country; and to honor the name of Kamehameha-The-Great.*

## **Ka Wānana ~ The Prophecy of May 18, 2024**

**'Imi i ke Akua i ke kūlana pūlama iā Pu'u o Kaluaokalani**  
*To seek Akua is to know the standards for the protection of cherished Pu'u o Kaluaokalani*

### **Hula 'Ala'apapa**

Ua kau ka la wela o Kona i luna  
sun perched above us at Kaloko  
He wahi ululi ma ka wao one  
Oasis and great water-laden mist  
Mai 'o Honokōhau a 'o Kaloko  
Honokōhau to Kaloko  
Ne'e 'ihi ia i ke kahua kaua Ali'i  
battleground's Royal Burials  
Pomaika'i ka wānana i ka ho'ā ilona  
blessing of a prophecy was being conveyed

Kona's hot  
When an  
Made its way from  
Sacredness marched over the  
As if the

Mai Kaloko i Kona akau  
A i Hōnaunau i Kona hema  
Hōnaunau in south Kona  
Eia 'O Pu'u o Kaluaokalani e  
Second Heaven  
'O Ka 'Āina Kapu Kanahā kāia  
the lands identified as the Forty Miles from Kaloko to Hōnaunau  
Maluoa 'a'ohē mea ho'oluhi 'ia  
& Enforced by God who Commands No Further Development

From Kaloko in north Kona  
To  
Here is the heart of the  
These are  
Protected



the U.S. in Hawai'i. Lands occupied by the NPS in Kona are Kaloko-Honokohau (KAHO) and Pu'uhoonua o Honaunau (PUHO). Both parks exist in the Kapu Kanahā (Pu'u o Kaluaokalani protected by Akua). Both parks are to implement new operations systems for the Restored Kingdom Of Hawai'i of Ali'i Nui Mo'i Edmund K. Paki - Silva II.

**On July 4, 2024 the declaration of the rejection of actions taken by the present superintendent prompted the "Letters of the Queen -- The Stand at Kaloko for the Restored Kingdom of Akua to be sent to all involved parties throughout Hawai'i.**

**Here was the manifestation of the Wānana -- the Prophecy -- conveyed by the Ancestors & received "in the mists" by the people on May 18, 2024.**

**To All 'Ōiwi, descendants of Citizens of the Kingdom of Hawai'i, People in Hawaii and People of the world: Here came the Declaration of Independence of Hawai'i from an Illegal Occupation begun in 1893 by an 'ACT OF WAR' by the United States of America against HRH Queen Lili'uokalani and the Kingdom of Hawai'i.**

Words of Light of the Ancestors of 'Ōiwi as  
conveyed to Lamakū Mikahala  
Roy, Kahu Ahu'ena Heiau Kamakahonu, Hawai'i

11/3/14

Kaloko-Honokōhau

**"You ask most respectfully for assistance related to a blessing sought for the National Park at Kaloko-Honokohau. May we add what we are endowed with to share.**

**Some of the Ancestors who rest here at Kaloko are they who were involved with great challenge in history. There was a battle here in a time of political change. Kamehameha the Great sought to procure the faith of the hearts of the people in him as ruler and as the representative of Most High Akua rather than in the traditions that upheld the flow of life for kaulike in the Puunohua.**

**Many who believed in the ages-old traditions of Spirit in Hawaii fought when the call for such action occurred. Many lost their lives believing to the way they were taught to believe. It would be a blessing pleasing to Akua Manamaloa that this aspect of the history be told in order to bring blessing and healing to all who lost their lives here and to their descendants.**

**That those of both sides be comforted and blessed and harm absolved and resolved by Akua is the desire of Akua and these Ancestors. This so that the Light brought forward will bless and heal all in the related 'Ohana -- every single One of their bloodlines. This, so that the Light brought forward nurtures the wellness, accord and peace of all who come here, work here, appreciate here from wherever they are. That the Light borne of this blessing from Akua aid and serve in the enlightenment presently occurring in all of Hawaii for the world."**

**The Ancestors of 'Ōiwi Who Uphold the Highest Light of Akua at Kamakahonu**



[Virus-free.www.akua.com](http://Virus-free.www.akua.com)

**From:** Kawika McKeague  
**Sent:** Wednesday, August 7, 2024 6:11 PM  
**To:** 221053-01 KS Keaouhou Entitlements  
**Subject:** FW: Draft EIS Keaouhou Bay 2 of 5 from Lamaku

**Categories:** Yellow Category



Kawika McKeague, AICP  
Principal

**From:** [Redacted]  
**Sent:** Wednesday, August 7, 2024 5:04 PM  
**To:** Kawika McKeague <[Redacted]>  
**Subject:** Draft EIS Keaouhou Bay

Aloha,

Please include in my testimony for the Draft EIS for Keaouhou my book of mele that tell the history of great change that has occurred in Hawaii for Owi, especially in Kona

The name of the book is 'Oili Na Hoku o Hina Kani Ka Pahu o Lono. I would like to make this presentation at the meet and greet opportunity to be planned by your staff.

Thank you,

HRM Ka I-omana ulaokalaniki'eki'eloakeahi'ena'enamauokalaulani

Lamakū

Kahunanui Ahu'ena Heiau  
Kamakahonu, Hawai'i  
Kauoha Ka Māmaka o Ka Lama  
The Divine Order of the Steadfast & Worthy Two Who Uphold the Highest Light of Akua at  
Kamakahonu

**From:** Kawika McKeague  
**Sent:** Wednesday, August 7, 2024 6:12 PM  
**To:** 221053-01 KS Keaouhou Entitlements  
**Subject:** FW: Draft EIS Keaouhou Bay 3 of 5 from Lamaku

**Categories:** Yellow Category



Kawika McKeague, AICP  
Principal

**From:** Lamakū Mikahala Roy <[Redacted]>  
**Sent:** Wednesday, August 7, 2024 5:06 PM  
**To:** Kawika McKeague <[Redacted]>  
**Subject:** Re: Draft EIS Keaouhou Bay

Kawika,

Thank you very much.

HRM Ka I-omana ulaokalaniki'eki'eloakeahi'ena'enamauokalaulani

Lamakū

Kahunanui Ahu'ena Heiau  
Kamakahonu, Hawai'i  
Kauoha Ka Māmaka o Ka Lama  
The Divine Order of the Steadfast & Worthy Two Who Uphold the Highest Light of Akua at  
Kamakahonu

On Wed, Aug 7, 2024 at 5:02 PM Kawika McKeague <[Redacted]> wrote:

Aloha mai e Lamakū Mikahala

Hope all is well. Sorry. I'm already out of the office for today but wanted to acknowledge that I received 5 emails from you today that will also be included with the two you shared on Monday as part of the formal submittal of comments for the DEIS. I will reply to you tomorrow with some suggested dates and times we can meet and visit the area. Mahalo again for everything. I will be in touch. Ke aloha, Kawika

[Get Outlook for iOS](#)

**From:** Lamakū Mikahala Roy <[Redacted]>  
**Sent:** Wednesday, August 7, 2024 4:55:20 PM

To: Kawika McKeague <[REDACTED]>  
Subject: Draft EIS Keauhou Bay

Aloha,

Please receive this photograph of Ahu'ena Heiau in the Restoration Phases that began circa 1975 to include in my comments in the Draft EIS for Keauhou Bay.

Thank you,

HRM Ka'I-omana'ulaokalaniki'eki'eloakeahi'ena'enamaoukalahaulani

Lamakū

Kahunanui Ahu'ena Heiau  
Kamakahonu, Hawai'i  
Kauoha Ka Māmaka o Ka Lama  
The Divine Order of the Steadfast & Worthy Two Who Uphold the Highest Light of Akua at  
Kamakahonu



Kawika McKeague, AICP  
Principal  
[REDACTED]

From: Lamakū Mikahala Roy <[REDACTED]>  
Sent: Wednesday, August 7, 2024 4:55 PM  
To: Kawika McKeague <[REDACTED]>  
Subject: Draft EIS Keauhou Bay

From: Kawika McKeague  
Sent: Wednesday, August 7, 2024 6:11 PM  
To: 221053-01 KS Keauhou Entitlements  
Subject: FW: Draft EIS Keauhou Bay 1 of 5 from Lamaku  
Attachments: Testimony.pdf  
Categories: Yellow Category

Aloha,

Please receive this photograph of Ahu'ena Heiau in the Restoration Phases that began circa 1975 to include in my comments in the Draft EIS for Keauhou Bay.

Thank you,

HRM Ka'I-omana'ulaokalaniki'eki'eloakeahi'ena'enamaoukalahaulani

Lamakū

Kahunanui Ahu'ena Heiau  
Kamakahonu, Hawai'i  
Kauoha Ka Māmaka o Ka Lama  
The Divine Order of the Steadfast & Worthy Two Who Uphold the Highest Light of Akua at  
Kamakahonu

Testimony of Lamaku Mikahala Roy, Kahu Ahu'ena Heiau  
Kamakahonu, Hawaii'

Re: SB\_3090; HB\_1985

Hawaii State Capitol, Rm 211  
Honolulu, Hawaii

April 5, 2018

Senator Kahele and Other Distinguished Members of Legislative Committees (of Higher Education,  
Water & Land and Ways and Means),

I am Lamaku Mikahala Roy, Kahu of Ahu'ena Heiau at Kamakahonu Hawaii. I inherit the walk  
begun by my father, Kahu David Kellifhelemauna Roy, Jr. who led the restoration of Ahu'ena Heiau  
in the 1970's. I am a Healer and a Teacher who begins anew the work of Kulana Huli Honua,  
*Foundation of the Search for Wisdom* within the land archive for Kamakahonu, Hawaii named Halau  
No'eu Kahelamauna, *the House of Wisdom of the Mountain-Roaming Chief*.

Ahu'ena Heiau at Kamakahonu is the Seat of the Living Fire of Akua-mana-mana-loa, Divine  
Creator Most High God. It is the first Heiau in the Pacific of the modern era restored for and by  
'Owa, *people of the bones of the Pacific*. Here, erected and dedicated to stand forever is the Lana-nuu-  
mamao, the Oracle upon the Earth. The Great Ancestors of 'Owi who guided King Kamehameha  
the Great guided the descendants born after him. It was Liholihoho, King Kamehameha II who  
responded this way when his wisdom was praised,

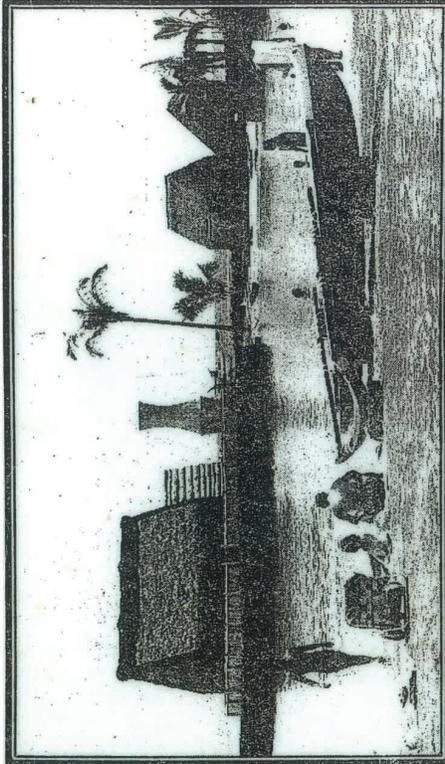
*Na wai ho'i kea 'ole o ke akamai be alanui i ma'i i ke hale 'ia e o'u mau makuai?  
Who would not be wise upon a path so well traveled by my ancestors?*

I have oral testimony to share to help you in deliberations pertinent to the sacred mountain of Earth,  
Mauna a Waka. I've traveled from Kona today to present this testimony alo i ke alo; in person, for  
it is mea nui, the matter of the utmost importance as I was unable to attend hearings on Hawaii.

Kamakahonu is the Capital of the Kingdom of Hawaii restored today by Alii Nui Mo'i Edmund K.  
Silva, Jr. Nou Ke Akua ke Aupuni O Hawaii'. Such is the proclamation of Akua-mana-mana-loa by  
Akua and by the Ancestors of 'Owi on the path of Light of Akua (Divine Creator Most High God).

Among Great Ones before us, Ke Alii Naluahine Ka'opua was the man named Konohiki of  
Kamakahonu in the Kingdom of Hawaii. Living to be well over 100 years of age, Ke Alii Naluahine  
Ka'opua is a cherished patriarch in family lines of Hawaii who descends in the lineage of Highest  
Divine Ones.

It is the voice of Spirit of this great Royal Ancestor and Others that guides me in this testimony and  
guides the work developing at Halau No'eu Kahelamauna at Kahalu'u Kona for Hawaii and Earth.



As Lamaku for Kamakahonu, Hawaii, I support the Conveyances of Divine Spirit. I uphold the leadership of Alii Nui Mo'i Edmund K. Silva, Jr. His actions and the work of Nou Ke Akua Ke Aupuni o Hawaii, are proof of his commitment to Akua.

The Kuleana of Greatest Leaders is the Great Responsibility. Alii Nui Mo'i Edmund K. Silva Jr.'s actions build the bridge of connection between mankind and the Highest Light. His actions lay the foundation for what we all may now construct in righteousness from this time forward.

**'O Hawaii ka 'Aina Malulu ~ Hawaii, land of the Eternal Wellspring**

Love is at the heart of all temples of worship in the Pacific. Such was the nature of our first world as 'O'iwi (the people of the bones).

The sacred pool is the place of peace, love and harmony.

**Here are examples of conveyances from Spirit:**

**April 14, 2010**

**Ancestors**

Erosion IS occurring AND we're not duplicating the virtues of the way of life of our Ancestors. As surely as blue rock is worn away by the constant wave action of the sea, the sturdy mountain that was the life and way of the Ancestors in our land is being converted to pebbles and grains. What comes to wipe the mountain away from existence? The constant barrage of thoughts and actions of a new way of life against the peaceful pond - against the way of peace, love and harmony.

**August 13, 2010**

**Chiefess Koniahiki, mother of Pauahi Pahi:**

The Heiau are the first altars built to God. This remains their committed purpose today. The Heiau represent the Kumulipo, ALL of Akua's creation. The support of the Heiau is the support of the way of life that HONORS the CREATOR. The rectangle represents our acknowledgement of all life God created. The rectangle represents the Kumulipo to honor ALL God's creations.

It represents the beginning of all religion today.

All Heiau of the Pacific represent the beginning of ALL religions today. They represent man's quest to bring the knowledge of the Heavens to the Earth.

**Queen Emma:**

Just think how powerful you would be if you put aside your differences and joined together as ONE then ask us, the Ancestors what to do. We are here to help in any way we can.

Ua mau ke ea o ka 'aina i ka pono. Everything is predicated upon righteousness. A rope, the aka cord, connects us to the past. Queen Emma says the strands of the rope are frail. The rope is made of our practices. Our belief system is based upon righteousness. Righteousness encompasses every aspect of life. We need to practice and experience righteousness.

The first strand is to take care of the 'Aina. The second strand is to take care of the needs of the People. The third is the religious practices of our Ancestors. The fourth strand is strong leadership that will not betray the People. The last strand is the need for much Aloha.

All the weaving of this rope is for the sole purpose of opening up our hearts with unconditional love for one other. This is our traditional way of being; it is the strongest possession that Akua has given us. When we grab a hold of THIS rope, we are grabbing hold of pure unconditional love. This is the Golden Cord of Unity of 'O'iwi.

**It is time to Ho'olokahi and to Ho'okuleana Hou i ka 'Aina Harmonize and Unite to Reclaim Responsibility for our Lands**

Here is the time to live our faith.

Here is the time to stand ~ to take action to protect that which never left our hearts nor our hands. We are told that Mauna a Wakea is Akua's Divine Mountain. We are called to stand to defend the truth that Hawaii is the country occupied ~ the Kingdom of Hawaii lives in the lands and the people.

My heart and my hands are ready to help to build the only future I wish to see for our descendants. That is a future of a Hawaii Ola Kule'a ~ a Hawaii where the people live in success, health and happiness.

Support the work now for the Restored Kingdom of Hawaii in the leadership of Alii Nui Mo'i Edmund K. Silva, Jr.

Milliani i Ke Akua (In Praise of Most High),

Keahimokuaweoweokalama'ihiiloanalani

Lamaku Mikahala Roy  
Kahu, Alui'ena Heiau Kamakahonu, Hawaii  
Kamakahonu@gmail.com

**From:** Kawika McKeague  
**Sent:** Wednesday, August 7, 2024 6:12 PM  
**To:** 221053-01 KS Keaouhou Entitlements  
**Subject:** FW: Disturbing Video from NPS Staff @ Puuhonua o Honaunau 5 of 5 from Lamaku

Yellow Category



Kawika McKeague, AICP  
Principal

**From:** Lamakū <[REDACTED]>  
**Sent:** Wednesday, August 7, 2024 4:21 PM  
**To:** Kawika McKeague <[REDACTED]>  
**Subject:** Fwd: Disturbing Video from NPS Staff @ Puuhonua o Honaunau

Aloha mai e Kawika,

Please include the following information in my testimony -- Draft EIS Keaouhou Bay.

Date: Fri, Jul 19, 2024 at 9:42 AM  
<https://share.icloud.com/photos/0f5hyGpcZoEWoRrRmTWjrmWA>

From: **Jim Medeiros Sr.** <[REDACTED]>  
Date: Fri, Jul 19, 2024 at 9:43 AM  
[https://share.icloud.com/photos/09f1\\_3zo9Rg-tB7W/hy9c3gM-g](https://share.icloud.com/photos/09f1_3zo9Rg-tB7W/hy9c3gM-g)

Sent from my iPhone

**From:** Kawika McKeague  
**Sent:** Wednesday, August 7, 2024 6:13 PM  
**To:** 221053-01 KS Keaouhou Entitlements  
**Subject:** FW: Letters From the Queen 07-04-24 6 of 6 from Lamaku  
**Attachments:** Royal\_Coat\_of\_Arms\_of\_Hawaii.svg.png; Letters from the Queen 07-04-24.pdf

Yellow Category



Kawika McKeague, AICP  
Principal

**From:** Lamakū <[REDACTED]>  
**Sent:** Wednesday, August 7, 2024 4:18 PM  
**To:** Kawika McKeague <[REDACTED]>  
**Subject:** Letters From the Queen 07-04-24

Aloha Kawika,

Please include the information in this entire email as my testimony in response to the Draft EIS for keaouhou Bay.

Thank you.

----- Forwarded message -----  
**From:** Lamakū Mikahala Roy <[REDACTED]>  
Date: Sat, Jul 13, 2024 at 12:44 PM  
Subject: Letters From the Queen 07-04-24  
To: [REDACTED]

**From:** [REDACTED]  
This message has been sent from Kona Business Center, chosen to represent the author.



By New Breaths in the Restored Kingdom,

Aloha Mau,

I declare this copy to be the full and accurate account of My Letters on July 04, 2024 beginning with my letter to Paul Scolari, Ph.D. of the NPS.

Please receive & peruse all content included here. Replace and discard all pages of the original document you received by mail and/or email with pages of this document only.

Mahalo,

HRM Ka'Īomana'ulaokalaniniki'eki'eloakeahi'ena'enamauokalaulani

Kahunanui Ahu'ena Heiau

Kamakahonu, Hawai'i

Ka Māmaka o Ka Lama

Divine Order of The Steadfast & Trustworthy Ones Who Uphold the Highest Light of Akua at Kamakahonu



Hālau No'eau Kahelemauna  
House of Wisdom of the Mountain-Roaming Chief  
Pu'u o Kaluaokalani



Dr. Scolari:

The purpose of this letter is to confirm my receipt of your letter of June 21, 2024, yesterday, 6/27/24 and to respond to it by special delivery mail today June 28, 2024.

Accompanying my letter, find attachments pertinent to the subject with which park staff, members of the community, special support groups & individuals, and yourself are well acquainted by numerous meetings with me over time.

The content of your letter is not the outcome that I, **HRH KA'Ī O MANA'ULAOKALANIKI'EKI'ELOAKEHI'ENA'ENAMAU'OKALAUANI LAMAKŪ**, representing **THE KINGDOM OF HAWAII RESTORED AT KAMAKAHONU** was expecting.

The course of action you outline in this communication is **REJECTED by the KINGDOM OF HAWAII RESTORED AT KAMAKAHONU THE FIRST CAPITAL OF THE KINGDOM OF HAWAII.**

In the 1970's my parents and other honored citizens are celebrated as Founders of Kaloko-Honokohau National Cultural Park to protect these royal lands from tourism development. The park has adopted the concept of a 'Spirit Day' to be held annually to honor the Honokohau Advisory Commission whose work in the seventies brought this park into being.

As recently as in a meeting held with you on my parents' birthday, 4/26/24, witnessed by staff member Keola Awong, you conveyed an understanding of how the care of these matters should be spiritually, peacefully, and respectfully conducted. You indicated your understanding and agreement with my suggestion that by abiding by the guidance of the Divine Creator received by SPIRITUAL MIRACLES from the Ancestors of Ōiwi, the call for the NAGPRA process is null and void. These burials at Kaloko-Honokohau are previously known and NOT INADVERTENT by report of the Ancestors of Ōiwi who

serve the Divine Creator of all mankind at Kamakahonu, the First Capital of the Kingdom of Hawaii of Kamehameha the Great. This Miracle of Spirit thereby cancels the call for the NAGPRA process at Kaloko Park. In all our meetings, you have never disagreed to this pronouncement.

**AS OF THIS DAY, 6/28/24, ALL WHO REST AT KALOKO-HONOKOHU NHP AND ALL WHO LIVE AND REST IN HAWAII, FORMERLY KNOWN AS THE 50 TH STATE, ARE RESTORED TO THE CARE OF AKUA MANAMANALOA IN HIS CHOSEN KING AND DECLARED QUEEN: HRH KING ALI'I NUI MŌ'Ī EDMUND K. PĀKĪ - SILVA, II AND HRH KA IŌ MANA'ULAOKALANIKI'EKI'ELOAKEAHI'ENA'ENAMAU'OKALAU'LANI QUEEN OF THE RESTORED KINGDOM OF HAWAII.**

'O ke 'Ano o Ka Lāhui i ka 'Ōhana

The Character of the Nation is Seen in the Family

**'Ōlelo No'eau Ali'i David Keli'ihelemauna Roy, Jr.**

**HRM Ka'Ī-OMANA'ULAOKALANIKI'EKI'ELOAKEAHI'ENA'ENAMAU'OKALAU'LANI LAMAKŪ**

KAHUNANUI AHU'ENA HEIAU  
KAMAKAHONU, HAWAII

KAUOHA KA MAMAKA O KA LAMA  
THE DIVINE ORDER OF THE STEADFAST & WORTHY TWO WHO UPHOLD THE  
HIGHEST LIGHT OF AKUA AT KAMAKAHONU

copies:

**HRH KING ALI'I NUI MŌ'Ī EDMUND K. PĀKĪ - SILVA, II, KAHU AHU'ENA HEIAU KAMAKAHONU, HAWAII**

Richard Tyler Paikuli-Campbell

The Board of Trustees Queen Lili'uokalani Trust  
The Board of Trustees Estate of Bernice Pauahi Bishop  
The Board of Trustees Charles Lunallilo Trust

HPD  
Group 70

2024 Mayoral Candidates of Hawaii County

**October 2, 2017**

*The National Park Service preserves unimpaired the natural and cultural resources and values of the National Park Service for enjoyment, education and inspiration of this and future generations.*

Gratefully, I submit the following comments, requests and edification to the Kaloko-Honokohau National Historical Park Draft Foundation Document. I am the daughter of the late Kahu David Kāhelemauna Roy, Jr. and I am his designated successor as Kahu of Ahu'ena Heiau at Kamakahonu, Hawaii. Kamakahonu Hawaii is the first Capital of the Kingdom of Hawaii of the Hawaiian Islands unified by Kamehameha the Great. It remains the abiding Capital of the Kingdom of Hawaii, country occupied.

To cite the words of this Draft Report that close the paragraph on page 8, I concur to say that SPIRIT of the first people of the Hawaiian Islands today IS strong and growing stronger in every moment.

I suggest that you make the change of the term **Native Hawaiian to 'Ōiwi** for 'Ōiwi is the accurate word by our ages-old and true language that identifies the first people of the Hawaiian Islands and our Pacific Family. Over time, this term for its accuracy has risen in use by the people and has supplanted the use of Native Hawaiian.

**SPIRIT**, and along with it, clarity and understanding by 'Ōiwi increases continually in Hawaii. We are a living people with living ancestors of SPIRIT seeking truth of our past for our health and well-being and the health and well-being of our descendants and our lands.

My heart and words are a part of the **SPIRIT Report**. My Kealakehe Intermediate Class Students are whose poetry graces the pages of this esteemed report. A supportive member to those of the Kaloko-Honokohau study commission, I became a member of Na Kokua Kaloko-Honokohau non-profit organization and later served as a member of the Na Hoapili Kaloko-Honokohau Advisory Commission. I am One who speaks in appreciation of wisdom and truth. My time and essence are a continuing part of the concern for the care and safekeeping of Kaloko-Honokohau even as it has moved into the care of the NPS.

I was in high school when Kupuna of Hawaii island and beyond came to meet with my father to discuss the large matter of an impending threat by hotel development to Kaloko-Honokohau in the early 1970's. It's thanks to the dedication of these people, others called upon by Akua along the way, and then to a growing group of us who absolutely stayed the course of effort to protect this area that this park is here.

These Kupuna made public stands to engender support against development of these lands so very important to the Lahui – to the nation of Hawaii. They gathered in united impassioned plea to protect their family members, their ancestors and ancestors of 'Ōiwi who lay buried at Kaloko. The facts were that numerous burials lay at this historic land place Kaloko-Honokohau. Why? There was greater history yet to know. 'Ōiwi and our descendants are called to know our complete history which is borne of SPIRIT in steps taken by our ancestors.

My older sister, Lynette 'A'alaonaona Roy Akana conducted the valued **Mo'olelo Ha'i Waha o Kaloko-Honokohau**, Oral History of Kaloko-Honokohau, in a day when such work was rare. She interviewed po'e (the people) of the area whose story and "way" of telling their story grows more valuable over time. She was a consultant, then, to the

Honokohau Study Advisory Commission and until her untimely passing, served as I did with dedication to the 'efforts of the people.'

My sister's report cites the importance of the religion of 'Oiwi to the history of the people at Kaloko-Honokohau.

This park is here ~ it was one option to provide safety to this area. This was a movement of and by SPIRIT. This remains a movement of and by SPIRIT at Kaloko-Honokohau and throughout the Hawaiian Islands. The determination and conviction in the hearts of the Kupuna I was among for a long time was palpable and convicting. I feel this impetus even now as I write these words to aid in the carriage of integrity in this Foundation Document. This is evidence of SPIRIT ongoing.

I am Lamaku Mikahala Roy, Kahu of Ahu'ena Heiau at Kamakahonu, Hawaii. Lamaku is the title my Ancestors give me that I am to use for it, in addition to the title of Kahu, is the identity of my Station in Spiritual Authority. I stepped off the NPS Na Hoapili Advisory Commission for the increase of the call for service to Akua as Kahu of Ahu'ena Heiau at Kamakahonu. Attached please see articles related to Kamakahonu, my father's and now my steps in time in our precious homeland.

In 2014 I was asked to conduct a blessing for the purpose of landscape clearing near and above Kaloko pond. In prayer to the Ancestors for guidance for this blessing, I was given the following spiritual conveyance by the Ancestors of 'Oiwi. By Akua, Divine Creator, it is now the time to reveal this conveyance to the parties involved and now to the writers of this Foundation Document. Here is the direct evidence that SPIRIT is real, ongoing and defines the foundation of these royal lands for 'Oiwi and all people of the Kingdom of Hawaii, for people of the United States of America who will visit here and all people of the world.

**Lamaku Mikahala Roy  
Kahu, Ahu'ena Heiau  
Kamakahonu, Hawai'i**

**Halau No'eau Kaletemauna  
House of Wisdom of the Mountain-Roaming-Chief  
Land Archive for Kamakahonu**

*Words of Light of the Ancestors of 'Oiwi as conveyed to Lamaku Mikahala Roy, Kahu Ahu'ena Heiau Kamakahonu, Hawai'i*

11/3/14

**You ask most respectfully for assistance related to a blessing sought for the National Park at Kaloko-Honokohau. May we add what we are endowed with to share.**

**Some of the Ancestors who rest here at Kaloko are they who were involved with great challenge in history. There was a battle here in a time of political change. Kamehameha the Great sought to procure the faith of the hearts of the people in him as ruler and as the representative of Most High Akua rather than in the traditions that upheld the flow of life for kaulike in the Puuhonua.**

**Many who believed in the ages-old traditions of Spirit in Hawaii fought when the call for such action occurred. Many lost their lives believing the way they were taught to believe. It would be a blessing pleasing to Akua Manamanaloa that this aspect of the history be told in order to bring blessing and healing to all who lost their lives here and to their descendants.**

**That those of both sides be comforted and blessed and harm absolved and resolved by Akua is the desire of Akua and these Ancestors. This so that the Light brought forward will bless and heal all in the related 'Ohana – every single One of their bloodlines. This, so that the Light brought forward nurture the wellness, accord and peace of all who come here, work here, appreciate here from wherever they are. That the Light borne of this blessing from Akua aid and serve in the enlightenment presently occurring in all of Hawaii for the world.**



United States Department of the Interior

NATIONAL PARK SERVICE  
Kaloko-Honokōhau National Historical Park  
73-4786 Kanalani Street, # 14  
Kailua-Kona, Hawaii 1 96740



IN REPLY REFER TO:  
1.A.2

February 29, 2024

Re: Initiation of Consultation for Inadvertent Discovery subject to the Native American Graves Protection and Repatriation Act (NAGPRA) 43 CFR Part 10

Aloha,

The purpose of this letter is to initiate consultation regarding inadvertent discovery of a possible tooth by a visitor at Kaloko-Honokōhau National Historical Park (Park).

The National Park Service (NPS) was notified on Friday, February 23, 2024 that a Park visitor found a tooth at the surface of the sand beach near Kaloko Fishpond Picnic Area and turned it over to the Hawaii County Police Department (HPD). The NPS is in communication with the HPD awaiting confirmation if the tooth is a human tooth and when the HPD will return the tooth to the NPS. More information will be shared with you as the NPS gets it from the HPD.

If the tooth is determined to be a human, the park will address the find under NAGPRA as an inadvertent discovery. Like previous NAGPRA repatriations at the Park, the NPS is amenable to reburial of the tooth in an appropriate location within the Park pending the completion of the NAGPRA process.

If you have any questions, please feel free to contact T [REDACTED]

Sincerely,

On behalf of  
Paul Scolari  
Superintendent



United States Department of the Interior

NATIONAL PARK SERVICE  
Kaloko-Honokōhau National Historical Park  
73-4786 Kanalani Street, # 14  
Kailua-Kona, Hawaii 1 96740



IN REPLY REFER TO:  
1.A.2

June 21, 2024

Re: Update regarding Consultation for Inadvertent Discovery subject to the Native American Graves Protection and Repatriation Act (NAGPRA) 43 CFR Part 10

Aloha,

The purpose of this letter is to update you regarding the inadvertent discovery of a possible human tooth by a visitor at Kaloko-Honokōhau National Historical Park (Park).

The National Park Service (NPS) was notified on Friday, February 23, 2024, that a Park visitor found a tooth at the surface of the sand beach near Kaloko Fishpond Picnic Area on Thursday, February 22, 2024. Rather than turning the tooth over to the NPS, the visitor contacted the Hawaii County Police Department (HPD) which took possession of the tooth. We requested that HPD transfer the tooth to the NPS immediately upon ruling out criminal involvement.

After repeated requests for the transfer of the tooth from HPD, the NPS was informed the responding HPD officer determined it was not human and disposed of the tooth.

The NPS received photos of the tooth from the Park visitor. The quality of the photos makes it difficult to determine if the tooth is human, although a trained osteologist indicated it may have indeed been human, possibly a baby molar. Because it was an isolated find with no direct context to an archeological site, the NPS cannot determine its age.

This is not the outcome the NPS was expecting. We communicated the gravity of this error to the HPD. They have requested that the NPS provide training to patrol officers on the inadvertent discovery of human remains within national park units. As part of this training, the NPS will provide information to HPD on the importance and requirements of NAGPRA, including the use of trained professionals for the identification of human remains.

We regret we were not able to make a positive determination about this tooth and treat it with the care required under federal law for human remains.

If you have any questions, comments or would like to discuss this matter, please contact

[Redacted contact information]

Sincerely,



Paul Scolari  
Superintendent



Respectful Greetings to the Trustees of the Queen Lili'uokalani Trust,

Aloha hou mai. Attached and presented here is great sacredness for your care. Here are words from Akua by the Ancestors of 'Ōiwi at Kamakahonu.

Akua intends to Heal the Planet and All Life Upon the Planet in Keaulama (The Era of Light). These sacred words of light from the Ancestors confirm the reality of 'Ōiwi Spirituality from the beginning of time to the present day.

Akua requires a moratorium on all new developments within 40 miles between Kaloko-Honokōhau and Honaunau in Kona, Hawai'i.

Akua guides that I am to present this Divine Wisdom to ALL 'Ōiwi. I am FIRST called to share with ALL 'ŌIWI -- encouraging them to be the first to receive their history & to peacefully take their stand in their light and power as the collective. We are called to share this great information with humanity that honors and obeys the commands of the Divine Creator of Heaven and Earth.

KA-LUA-O-KA-LANI means THE SECOND HEAVEN. KALUAOKALANI IS THE ANCIENT NAME FOR HAWAII

Here is why this land is the home of Ka 'Io, the Heavenly Hawk. Here is why Keolonahihi and Kaluaokalani have ALWAYS BEEN FIERCELY PROTECTED by the Great Ones of Highest Light Who Rest at Mauna a Wakea and by their Descendants in this present day.

Kona 3 LLC is a Developer and Applicant for the development of expensive housing on lands within the Ka'uha Kapu Kanahā ~ the 40-mile land area Divine Creator orders to be secured in peace with no new development upon it. We're asked to follow Akua's guidance for the protection of Mauna ā Wākea, the planet and all life upon the planet.

The developer's application will be voted upon by the Hawaii County Council in the main meeting chambers at the West Hawai'i Civic Center on Tuesday, 7/10/24. Here is the call to ALL 'ŌIWI of the planet and in Hawai'i to submit their testimony in writing to [counciltestimony@hawaiicounty.gov](mailto:counciltestimony@hawaiicounty.gov) by noon -- 7/9/24. 'Ōiwi and Supporters

of Ōiwi may send their testimonies in **support** of Akua's Kauoha and **against** plans for Kona 3 LLC.

**All Ōiwi and Supporters are invited to SIGN UP** online for this hearing - via Zoom by direct phone request to the Office of the County Clerk at (808) 961-8255 or by sending a request by email to [councilremotetestimony@hawaii.county.gov](mailto:councilremotetestimony@hawaii.county.gov) **no later than Noon on 7/9/24.**

**HERE & NOW** is the call for the collective, peaceful, powerful stand to honor Akua's guidance to Ōiwi to OBEY AKUA. Here is the call to protect the 40 miles in Kaluaokalani completely honoring the Sacred Message of Akua.

**KEEPSAKE OF HONOR FOR "THE NEW GREATEST STORY EVER TOLD"**

Gifts for all Ōiwi and Supporters of Ōiwi are being created! Tee Shirts as gifts at no charge in all sizes for Keiki through Kupuna will carry the treasured Divine History for ourselves and generations to come.

THE ANCESTORS SAY THAT KEAULAMA IS "THE NEW GREATEST STORY EVER TOLD."

Mililani i Ke Akua

Ka ʻŌmanaʻulaokalanikiʻekiʻeloakeahiʻenaʻenamauokalaulani

Lamakū  
Kahunanui Ahuʻena Heiau  
Kamakahonu, Hawaiʻi

Kauoha Ka Māmaka o Ka Lama

**The Divine Order of the Steadfast & Worthy Two Who Uphold the Highest Light of Akua at Kamakahonu**



**Respectful Greetings to the Trustees of the Bernice Pauahi Bishop Estate:**

Aloha hou mai. Attached and presented here is great sacredness for your care. Here are words from Akua by the Ancestors of Ōiwi at Kamakahonu.

Akua **PROMISES** to Heal the Planet and All Life Upon the Planet in Keaulama (The Era of Light). These sacred words of light from the Ancestors confirm the reality of Ōiwi Spirituality from the beginning of time to the present day.

Akua requires a moratorium on all new developments within 40 miles between Kaloko-Honokōhau and Hōnaunau in Kona, Hawaiʻi. This Kauoha o Ke Akua at this time speaks to only new development within the 40 miles between Kaloko and Hōnaunau.

Akua guides that I am to present this Divine Wisdom to ALL Ōiwi. I am FIRST called to share with ALL ŌIWI -- encouraging them to be the first to receive their history & to peacefully take their stand in their light and power as the collective. We are called to share this great information with humanity that honors and obeys the commands of the Divine Creator of Heaven and Earth.

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Here is why this land is the home of Ka ʻIo, the Heavenly Hawk. Here is why Keolonahihī and Kaluaokalani have ALWAYS BEEN FIERCELY PROTECTED by the Great Ones of Highest Light Who Rest at Mauna a Wakea and by their Descendants in this present day.

Kona 3 LLC is a Developer and Applicant for the development of expensive housing on lands within the Kauoha Kapu Kanahā ~ the 40-mile land area Divine Creator orders to be secured in peace with no new development upon it. **We re asked to follow Akua's guidance for the protection of Mauna ā Wākea, for the planet and all life upon the planet.**

The developer's application will be voted upon by the Hawaii County Council in the main meeting chambers at the Hilo County Building on Tuesday, 7/10/24. Here is the call to ALL 'ŌIWI of the planet and in Hawaii to submit their testimony in writing to [counciltestimony@hawaiicounty.gov](mailto:counciltestimony@hawaiicounty.gov) by noon -- 7/09/24 'Ōiwi and Supporters of 'Ōiwi may send their testimonies in support of Akua's Kauoha and against plans for Kona 3 LLC.

All 'Ōiwi and Supporters are invited to SIGN UP online for this hearing - via Zoom by direct phone request to the Office of the County Clerk at (808) 961-8255 or by sending a request by email to [councilremotetestimony@hawaiicounty.gov](mailto:councilremotetestimony@hawaiicounty.gov) no later than Noon on, 7/09/24.

HERE & NOW is the call for the collective, peaceful, powerful stand to honor Akua's guidance to 'Ōiwi to OBEY AKUA. Here is the call to protect the 40 miles in Kaluaokalani completely honoring the Sacred Message of Akua - Most High God for All Believers of the World.

#### KEEPSAKE OF HONOR FOR "THE NEW GREATEST STORY EVER TOLD"

Gifts for all 'Ōiwi and Supporters of Ōiwi are being created! Tee Shirts as gifts at no charge in all sizes for Keiki through Kupuna will carry the treasured Divine History for ourselves and generations to come.

**THE ANCESTORS SAY THAT KEAULAMA IS "THE NEW GREATEST STORY EVER TOLD."**

Mililani i Ke Akua

**HRM Ka 'Ī omama 'ulaokalamiki'eki'eloakeahi'ena'enamauokalaulani**

**Lamakū**

Kahunanui Ahu'ena Heiau  
Kamakahonu, Hawai'i

Kauoha Ka Mamaka o Ka Lama

**The Divine Order of the Steadfast & Worthy Two Who Uphold the Highest Light of Akua at Kamakahonu**



Esteemed Greetings to the Trustees of the King Lunalilo Trust:

I am humbly inspired to read each of your backgrounds conveyed by the Trust's website.

We are told by good teachers of the world that history is made every day. I reach to you to reach to the heart of Alii King Lunalilo. I was guided by Akua to do so. Yours is one of three great trusts left by our Alii for the betterment of 'Ōiwi, the first people of the Pacific and Hawai'i. The materials enclosed in the pages of documents mailed to you tell a story. We have had a miracle at Kamakahonu. In 2010, I began hearing from the Ancestors of 'Ōiwi including our Great Kings and Queens. I reached to tell the members of the Hawaii State Legislature in a letter dated 3/3/21. I wrote letters to the Governor, the Mayors and county councils of every island to share this miraculous news.

When my father created the Temple Drum for Ahu'ena Heiau, the Temple he loved and restored, I had a calling to travel to all schools and announce by voice and flyer the excitement that came from the first restoration of the ancient Temple and First Capital of Hawai'i. I carried this out as I shared how Pahuai'ikoaka'awaloa is the first Temple Drum to be named in association with the first restored temple in Hawai'i, the Pacific and the world. Alii Lanakilakeihialii Na'ope guided the naming process. He told me to pray and ask Akua. I soon met as I served as a docent at Hulihe'e Palace, Sarah Malina Kalikhea of Nawiliwili Kaua'i, 87 years young, who taught us that the name of the Temple Drums are given in honor of the land they grew upon. They are called Pahuai'i, the drum of the chiefs, and so now all may honor Ka'awaloa uka where the log came from. The life to Pahuai'ikoaka'awaloa came by a naming ceremony conducted at Kamakahonu at the dawn of the millennium. 2000, by the Drum Maker, Dr. Kalena Silva of Ka Haka 'Ula o Ke'elikolani, myself and Coline Aiu Kumu Hula of Hālau o Kumukahi and Hālau Hula o Maiki, respectively.

Please review the email document I enclose entitled "The Reach to 'Ōiwi on Earth is On." This tells of even greater news from the Ancestors who represent Most High God at Kamakahonu.

By Akua, Hawai'i's Chosen King Ali'i Nui Mō'ī Edmund K. Fāki - Silva II and Hawai'i's Declared Queen Ka'i'omana'ulaokalani'eki'eloakeahi'ena'enamauokalaulani, humbly, Ali'i of our time reach in greatest reverence, respect and honor to the heart of Ali'i King Lunalilo by communication in Spirit and with the esteemed Trustees of the King Lunalilo Trust.

O ke 'Ano o ka Lāhui i ka 'Ohana

The character of the nation is seen in the family

'Ōlelo No'eau Restorer of Ahu'ena Heiau Ali'i David Keli'ihelamauna Roy, Jr.

Ka'Ī'omana'ulaokalani'eki'eloakeahi'ena'enamauokalaulani

Lamakū

Kahunanui Ahu'ena Heiau

Kamakahonu, Hawai'i

Kauoha Ka Māmaka o Ka Lama

**The Divine Order of the Steadfast & Worthy Two Who Uphold the Highest**

**Light of Akua at Kamakahonu**

**From:** Lamakū Mikahala Roy  
**To:** Cultural Resources Commission; Kina Paki-Silva  
**Cc:** Tanaka Kim Morrison; Bethany Sullivan; Kevin  
**Subject:** Spiritual History in the Living Oral History by Ancestors of 'Ōiwi at Kamakahonu  
**Date:** Monday, July 10, 2023 9:34:59 AM

July 10, 2023

## **Oral History** **Spiritual Conveyance of** **Ancestors of 'Ōiwi at** **Kamakahonu**

**To:** Members of the Hawaii County Cultural Commission

**From:** Lamakū Mikahala Roy  
**Ahu'ena Heiau, Kamakahonu**

**Re:** **Pu'u o Kaluaokalani**  
Oral Testimony re: Application of Kona 3 LLC

## **Oral History** **Spiritual Conveyance of** **Ancestors of 'Ōiwi at** **Kamakahonu**

**Pu'u o Kaluaokalani** means the "Repository of the Especially Sacred Lands of the Ages for Akua."

**Pu'u o Kaluaokalani** is the identification of the utterly sacred beating heart of Life upon the Earth. **Pu'u o Kaluaokalani** encompasses 40 miles in Kona from Kaloko-Honokōhau in the

north to Hōnaunau in the south.

Located within the expanse of this area is **Ahu'ena Heiau** (meaning "Burning Altar" referring to the Great Light there). **Ahu'ena Heiau** is the first Temple built by 'Ōiwi (mankind) upon the Earth.

Man's reach to Akua was honored by the Divine Creator of Heaven and Earth. The **Lana Nu'u Mamo** stands forever reminding mankind that man and all of life were created by Akua (Divine Source of All Life).

The **Lana Nu'u Mamo** (sacred Oracle Tower) stands upon **Ahu'ena Heiau** forever reminding man of the sacred relationship that exists between Akua (Divine Creator) and all of life created by Akua.

The 40 miles are the base and perimeter of the true **ORACLE** upon the Earth which is **Mauna a Wakea**. The **Lana Nu'u Mamo** symbolizes **Mauna a Wakea** upon **Ahu'ena Heiau**.

Akua created life in the Pacific in **Kaluaokalani** (meaning the Second Heaven and the First Name for Hawai'i) so very long ago.

**Ke-au-lama** means "The Era of Light." In **Keaulama, Akua intends to HEAL THE PLANET AND ALL LIFE UPON THE PLANET.**

The creation of Earth and life by Akua may not be quantified. Likewise, the Light, Hope, and Healing in Life by Akua in **Keaulama**, the Era of Light, may not be quantified.

**KEAULAMA** is the re-birth of the Earth planet in **Kaluaokalani**.

**KEAULAMA, The Era of Light, is Akua's Gift to mankind and to all of life wherein Akua promises to HEAL THE PLANET AND ALL LIFE UPON THE PLANET BEGINNING IN HAWAI'I.**



## Halau No'eau Kahelemauna

*House of Wisdom of the Mountain-Roaming-Chief*

**Halau No'eau Kahelemauna** is the location where 'Oiwī (Pacific Natives) and all of mankind may learn of the Age of Light (Kē-āu-lama) and be taught of Akua's (Divine Creator's) prescription for their healing.

**IN THE AGE OF LIGHT, AKUA PROMISES TO HEAL THE PLANET AND ALL LIFE UPON THE PLANET.**

By learning the cosmology of the first faith of 'Oiwī in the Pacific, Divine Creator intends to heal the planet and all life upon the planet.

**Halau No'eau Kahelemauna** will be the first and key location in Hawai'i to teach others from other world centers the way to derive and to learn healing by Akua.

The vision unfolds by the restoration of the Garden named Mala'ai Pilihonua (Garden Beloved by the Earth) wherein all of the first plants of Kaluaokalani (the Second Heaven) and an ancient name for Hawai'i will be planted, loved and nurtured.

The holoholona (animals) that dwell here will be loved and nurtured by humans for an outcome of lives in peace and harmony. This is the restored rhythm and vibration of Kaluaokalani.

**Lamaku Mikahala Roy**



## AHU'ENA HEIAU • KAMAKAHOHŪ, HAWAII HĀLĀU NO'EĀU KAHELEMALINA HOUSE OF WISDOM OF THE MOUNTAIN – ROAMING CHIEF LAND ARCHIVE & OFFICE OF THE KAHU

Aloha Kakou e ka 'Oihana,

In the mid 1970's Ahu'ena Heiau at Kamakahonu Hawaii was restored by 'Oiwī. David Kahelemauna Roy, Jr. led that effort for Akua and became Kahu of Ahu'ena Heiau by Akua and the people in the 'Aha Kumu Pono at Kamakahonu. Ahu'ena Heiau is the first restored temple of worship in the Hawaiian Islands of the modern era.

Kahuna La'au Lapa'au Morrnah N. Simeona said that the seventies were a time of great spiritual growth for Hawaii and her people. Among numerous efforts carried out meaningfully in the communities, Hokule'a traveled to Kahiki, Ho'oponopono was implemented in the Geneva Convention and taught to the world and Ahu'ena Heiau was restored in the Hawaiian Islands.

This restoration of Ahu'ena Heiau (Burning Altar -- referring to the Great Light there) was guided by Akua in the hearts of the men who came from all islands with the main working crew coming from Kona. There was no Office of Hawaiian Affairs, no presence of a state historic preservation department only dedicated and faithful individuals with pride for the heritage of 'Oiwī, pride in their bloodlines and respect for the First Capital of the Kingdom of Hawaii and all that came with it.

In 2005, I succeeded my father as Kahu of Ahu'ena Heiau. By loving communication with the Ancestors beginning for me in these past years, I'm instructed by them of the name our people have held for the station I inherit by Akua and my father.

I am guided by Akua and by Ancestors who serve Akua Manamana'aloa in the Pacific. I learn and teach the cosmology of the first faith of Hawaii, 'āina kulaiwi; ke 'āina mauiauhonua.

Miiliani i Ke Akua,

*Lamaku Mikahala Roy*

Lamaku Mikahala Roy, Kahu Ahu'ena Heiau  
Kamakahonu, Hawaii

May 23, 2015

Meeting of Mauna Kea 'Ohana; HCC campus, Hilo Hawaii  
Comments of Lamaku Mikahala Roy, Kahu, Ahu'ena Heiau Kamakahonu, Hawaii

Aloha mai kakou,

I am Lamaku Mikahala Roy from Kona and I appreciate all the mana'o being brought forward today. I'm grateful for all gatherings to form and relate as Mauna Kea 'Ohana.

The Ancestors of 'O'iwi are active and worldwide, people actively engage with Divine Realm. In 2010, the commemoration of the 20th anniversary of the unification of the Hawaiian Islands by Kamehameha the Great, Divine Conveyances from the Ancestors of 'O'iwi began at Kamakahonu.

On Mother's Day, 5-10-2015, a woman received a telepathic message from an 'io, she reported, in Waikoloa. She saw in her mind's eye, the bird's features, colors and markings and was told where to look to find him. Driving along the highway, she soon did come upon the One who called her. He had passed on.

This woman made a call that came to me. I went to prayer in the noon hour of that day. A powerful Divine Conveyance came forward. Please see attached. Here is what I'd like to share with you all today. Between the first & second meetings of the Mauna Kea 'Ohana, this event and a most significant ceremony related to it took place.

First, please read the attached full message. Then, I'd like to make emphasis by what is in my na'au today to share with you related to it. Here are my words of emphasis.

Akua, in this Divine Conveyance, proclaims Mauna a Wakea to be the Holy Mountain of Creator and best representation of Kaluaokalani. Akua confirms in Hawaii. Spirit is honored by Akua's Firstborn, na Hiapo. As such, Akua still Guides in the care of the Hawaiian Islands. Akua proclaims a leader by genealogy and divinity, Alii Nui Mo'i Edmund K. Silva, Jr. and the support system formed with the people, Nou Ke Akua Ke Aupuni O Hawaii (For You, Akua, the Government of Hawaii).

Safety comes by Life with Akua. In the desire for Safety and Protection of the Hawaiian Islands from further desecration of Lands and Spirit of 'O'iwi, I hope that the 31 persons arrested and all who support Mauna a Wakea will agree that Guidance from the Source for Hawaii has been received.

Let the Heavenly Lands be protected along with the people by Akua. Let transparent relating characterize the true and worthwhile efforts of aloha 'aina and aloha ka po'e.

E Ho'ola i ke Aupuni Pono'i ~ Revive the government rooted in the righteousness of Akua for the lands and the people.

**The Message of the Sacred, Royal Messenger in Waikoloa is:**

**'O ka pono ke hana 'ia**

**A iho mai na lani**

WINDS OF LOVE SWIRL SURROUNDING MAUNA KEA UPON THE EARTH  
EXTENDING OUTWARD TO THE MOST DISTANT REALMS OF SILENT  
AND RESOUNDING SPACE.

GREAT WINDS CARRY THE LOVE OF DIVINE CREATOR FOR ALL  
CREATION FROM THE LARGEST TO THE SMALLEST MATTER. GREAT  
WINDS OF LOVE REMIND ALL LIFE WHERE YOU COME FROM ~ ON THIS  
DAY TO HONOR MOTHERS AND MOTHERHOOD ~ NOW RECALL AND  
HONOR THE CREATOR OF ALL LIFE.

LET THIS DATE, 5 - 10 -2015, REMIND US FOREVER OF 'IO (10) THAT  
DELIVERS A MESSAGE AND CONFIRMATION. THE RESTORATION OF  
THE KINGDOM OF HAWAII IN THE COMPLETE HAWAIIAN  
ARCHIPELAGO OF ISLANDS IS IN PROCESS.

MANKIND FORGETS THAT ALL OF CREATION BELONGS TO ME, YOUR  
DIVINE CREATOR. ONE OF MY FORMS ON EARTH IS THE 'IO SEEN IN  
ITS HOME IN HAWAII. HOW IS IT THAT WORDS ARE EXPRESSED BUT  
THEN FORGOTTEN?

*Psalm 24:1 "The Earth is the Lord's, and the fullness thereof; the world and they that  
dwell therein. For He has founded it upon the seas and established it upon the rivers."*

IN HAWAII, THE WORDS YET LIVE ~ SPIRIT IS HONORED BY MY  
FIRSTBORN, KNOWN AS HIAPŌ. KALUAOKALANI IS THE NAME THAT  
AMONG OTHER TRANSLATIONS MEANS "THE SECOND HEAVEN." IT IS  
THE LOVING FIRST HOME OF DIVINE WORLD AND HUMANKIND; THE  
FIRST HOME OF DIVINE BEINGS AND MAN. HERE LOVE WAS THE  
VIBRATION THAT PERMEATED AND MADE ALL LIVE IN HARMONY AND  
THRIVE.

THE NAME OF THE LAND PERSISTED THROUGH PRESENT  
GENERATIONS AND IS NOW BEING REINVIGORATED.

KALUAOKALANI IS PERHAPS BEST REPRESENTED BY HER TALLEST  
MOUNTAIN PEAK, YET SHE HAS NUMEROUS WONDROUS  
REPRESENTATIONS IN THE WATERFALLS, THE VALLEYS, THE RIVERS,  
THE SEAS. THE PEAK IS MAUNA A WAKEA; MY HOLY MOUNTAIN AND  
PLACE HELD IN GREATEST REVERENCE.

LET THIS BE THE COMMEMORATION OF THE DAY HEAVENLY HAWK IN  
WAIKOLOA CONVEYED MY MESSAGE TO THE GREATEST AND THE  
SMALLEST OF MY CREATIONS IN THE PLACE I'VE PREPARED TO SERVE  
THE EARTH AND MANKIND. LET KALUAOKALANI AWAKEN ALL TO  
LOVE AND HARMONY.

THE RESTORATION OF THE KINGDOM OF HAWAII LED BY ALII NUI MO'I EDMUND K. SILVA, JR. AND NOU KE AKUA KE AUPUNI O HAWAII IS UNDERWAY. THE UNITY OF 'OIWI OF THE PACIFIC IS HELD IN SPIRIT BY THEIR ANCESTORS WHO SERVE ME.

FROM THE VERY FIRST KINGDOM ESTABLISHED AT KAMAKAHONU, MY HOLY LIGHT HAS SHINED THROUGHOUT ALL MOVEMENTS OF MAN.

NOW BY THE READINESS OF ALL WORKERS FOR LIGHT AND WORKERS FOR MY HOLINESS THROUGHOUT THE WORLD DO I PROCLAIM MAUNA A WAKEA MY HOLY MOUNTAIN AND KO HAWAII PAE 'AINA AS LANDS OF KALUAOKALANI NOW OCCUPIED BY THE UNITED STATES OF AMERICA.

NOU KE AKUA KE AUPUNI O HAWAII BY ALII NUI MO'I EDMUND K. SILVA, JR. IS ENFORCED TO RESTORE MY HOMELAND THE PACIFIC AND ALL OF MY CREATIONS FOR THE GOOD OF ALL LIFE AND TIME TO COME.

HE 'OIA 'O NO. TRUTH INDEED.

Received and Recorded on May 10, 2015

By Lamaku Mikahala Roy

Lamaku Mikahala Roy, Kahu Ahu'ena Heiau  
Kamakahonu, Hawaii



From: Lamakū Mikahala Roy <[REDACTED]>  
Date: Sun, Jun 23, 2024 at 11:34 PM  
Subject: Question from Waiaka

To: Ryan McCormack <[REDACTED]>, Aolani Kailihou <[REDACTED]>

Hālanu No'eau Kahelenauna  
House of Wisdom of the Mountain-Roaming Chief  
Pu'u o Kaluaokalani

**[REDACTED] : landline**

Aloha e Ryan me Aolani,

Thank you for your patience. Mahalo nui loa mau for the wonderful day we shared together last week. Mahalo for our wonderful luncheon. Mahalo nui loa for the wonderful gift of Ke Kunu Aupuni. I am very grateful -- beyond words -- for everything.

The member in our group by the name of Waiaka, asked me a deep and insightful question. Please share the following answer with him. Also please share my email address with Waiaka and all the participants. I would love to hear from all of you at any time!

**Waiaka:**

"So, since Kahumanui Hewahewa served Ka Mō'ī Kamehameha Akahi, has much changed?"

**Lamakū:**

Kahumanui Hewahewa, kau i ka 'Ihi (held in highest respect) departed Earth realm on February 16, 1837.

Hohonu ka ninau. I ask for the answers from the ancestors & here they are:

Ae, changes have been made on Earth as they are called for by Akua manamanoa.

**You may give Waiaka the example of the new Kaouoha of Akua in Ke Kaouoha Ka Māmaka o Ka Lama at Kamakahonu. You see in this example how life on Earth at Ahu'ena Heiau changed by changes made by Akua.**

**Kaouoha Ka Māmaka o Ka Lama:**

## **BE IT KNOWN**

The Ancestors of Ōiwi teach all on Earth that Ahu'ena Heiau is the First Temple of Spiritual Worship built by mankind on the planet. Ahu'ena Heiau was built by the Firstborn of Akua, ka Ōiwi.

In 1975, Ahu'ena Heiau was restored by Ōiwi led by Ali'i & Kahu David Keii'ihelemauna Roy, Jr. -- the Restorer of Ahu'ena Heiau. In gratitude to Akua, in commemoration of the great progress made for Ōiwi and mankind by the restoration of Ahu'ena Heiau, the 'Aha'āina Kumu Pono (Gathering for True Foundations), the community feast, was held at Kamakahonu.

The Kaouoha Ka Māmaka o Ka Lama was declared following the passing of Ali'iwahine Verda Leialoha Vida-Roy. This Spiritual Order declares that based upon the Lives and Service of Ali'i David Keii'ihelemauna Roy, Jr. and Ali'iwahine Verda Leialoha Vida-Roy, from this time forward there are Two Positions of Responsibility to Akua for Ahu'ena Heiau; One for the Male or the Kahu and the Second, for the Female; Divine Servant of Akua and Helpmeet of the Kahu. This is now Spiritual Law at Kamakahonu in Hawaii for the Earth. Oia ke Kaouoha Ka Māmaka o Ka Lama which means: The Divine Order of the Two Steadfast Ones Who Uphold the Highest Light of Akua at Kamakahonu. This Law of Spirit Lives.

Here is the guidance of Akua. The King is chosen as Kahu of Ahu'ena Heiau. In equal responsibility as Kahu of Ahu'ena Heiau is Lamakū and Kahunanui of Ahu'ena Heiau Mikahala Roy from now on to be known by her Royal Name of HRM Queen Ka 'I o-mana'ula-o-ka-lani-ki'eki'e-joa-ke-ahi-'ena-'ena-mau-o-ka-lau-lani by proclamation of the Ancestors of Ōiwi for Akua and the King Ali'i Nui Mō'i Edmund K. Paki - Silva, II, respectively.

By order of Akua, Kamakahonu is upheld as the Restored Kingdom of Hawaii by King Ali'i Nui Mō'i, Edmund K. Pākī - Silva, II Kahu, Ahu'ena Heiau. Kamakahonu is the Restored Capital and First Capital of the Kingdom of Hawaii by Ka Nai' Aupuni, King Kamehameha-the-Great the Conqueror of the Islands.

Ahu'ena Heiau is now the Home and Anchor for the Life of the Restored Kingdom of Hawaii by Hawaii's King Ali'i Nui Mō'i Edmund K. Paki - Silva, II. Ahu'ena Heiau remains the Holy First Temple of service to all mankind including those individuals who wish to remain U.S. citizens. Here expresses a condition, provided by Akua, that will provide peace and continued service to mankind and all life on the planet.

He 'Oia'i'o Nō  
Truth Indeed

May we share again soon. I look forward to speaking again and seeing you again on Wed. June 26, 2024.

Waiwai Mau Ke Kumu  
Akua is Our Infinite Source

Aloha Ke Akua

HRM Ka'ī-omana'ulaokalamiki'eki'eloakeahi'ena'enamauokalaulani

Lamakū

Kahunanui Ahu'ena Heiau  
Kamakahonu, Hawaii

Kaouoha Ka Māmaka o Ka Lama  
The Divine Order of the Steadfast & Worthy Two Who Uphold the Highest Light of Akua  
at Kamakahonu

**Kūlana Huli Honua**  
**Foundation of the Search for Wisdom**

Pahuaiiikoakaawaloa

Honorable Members of the Hawai'i 31st Legislature 2021  
 Hawaii State Capitol  
 415 South Beretania  
 Honolulu, Hawai'i 96813  
 March 3, 2021

**Welina i Ke Ola o Ka La e Nā Lāiā o ka 'Aha 'Olelo Kau Kānawai:  
 Greetings in the Life-Giving Warmth of the Sun to Members of the Hawai'i State Legislature**

**In the mid-1970's Ahu'ena Heiau at Kamakahonu was restored by 'Ōiwi. Kahu David Ke'i'i'helemauna Roy, Jr. led that effort for Akua and became Kahu of Ahu'ena Heiau by Akua and the people in the 'Aha Kūnu Pono, the Gathering for True Foundations, at Kamakahonu. Ahu'ena Heiau is the first restored Temple of worship in the Hawaiian Islands, in the Pacific and in the world.**

The restoration of Ahu'ena Heiau (translated as **Burning Altar** referring to the **Great Light** there) was guided by Akua in the Kahu and in the hearts of the men who came from all islands with the main working crew coming from Kona. There was no Office of Hawaiian Affairs, no presence of a state historic preservation department, only dedicated and faithful individuals with pride for the heritage of 'Ōiwi, pride in their bloodlines and respect for the First Capital of the Kingdom of Hawai'i unified by Kamehameha-the-Great. I'm instructed by the Ancestors that all members of the steady crew that restored Ahu'ena Heiau are to be acknowledged as Ali'i.

Kahuna La'au Lapa'au Mornmah N. Simeona said that the Seventies were a time of great spiritual growth for Hawai'i and her First People. Among numerous efforts carried out meaningfully in the communities, Hokule'a traveled to Kahiki, Ho'oponono was implemented at the Geneva Convention and taught to the world and Ahu'ena Heiau was restored in the Hawaiian Islands.

In 2005, I succeeded my Father as Kahu of Ahu'ena Heiau. By loving communication with the Ancestors of 'Ōiwi who uphold the Highest Light of Akua at Kamakahonu beginning for me in these past years, I'm instructed by them of the name our people have known over centuries for the Station I inherit by Akua and by my Father.

I am Kahu of Ahu'ena Heiau and I am Lamakū. I am guided by Akua and by Ancestors who serve Akua Manamanaoa in the Pacific. I learn and teach the cosmology of the first faith of Hawai'i, ka 'Āina Kula'iwi; ka 'Āina Mauliauhouua ~ Hawai'i Homeland, Hawai'i Land of the Established Families of the Land.

For the sake of yourselves, your children and their children to come; for the sake of Beloved Heaven and Earth now coming together as one in Keaulama the Era of Light in Hawai'i for the Earth, take the appropriate time you require to read and comprehend the WORDS OF LIGHT of the Ancestors of 'Ōiwi that follow. Receive these words. Prepare to open your hearts that you will hear the Voice of your Loving Source through these WORDS OF LIGHT.

E 'Imi Mau i ka Malu Mualoa o ke Akua,  
 Seek Forever the First Peace of Divine Creator

*Lamakū 'Ihaka'ala Roy*

Lamakū Mikahala Roy  
 Kahu Ahu'ena Heiau  
 Kamakahonu, Hawai'i

Kamakahonu@gmail.com

## **I. Nā Hua'ōlelo i Ka Lama o Nā Kūpuna o 'Ōiwi Kau i Ka 'Ihi Words of Light of the Most Revered Ancestors of 'Ōiwi**

### **Guidance from Akua for the planet is to take place from Mauna a Wakea in the New Age of Light in Keaulama (The Era of Light)**

We wish to impart Akua's plan to be shared with the members of Hawai'i's State Legislature in the peace of their forum that they may comprehend & convey the biggest view and understanding of Mauna a Wakea to the Governor of Hawai'i, all other Representatives of the U.S. Government; the President of the U.S. and to all World Leaders.

As Kahu of Ahu'ena Heiau but also so importantly and historically for Hawai'i and the planet -- as Lamakū, the station you inherit by Akua for Service to Akua, you are called by Akua to teach the cosmology of 'Ōiwi for 'Ōiwi and for all of mankind. You are a Divine Healer by Akua for 'Ōiwi and for all of mankind, the planet and all life upon the planet.

Akua calls upon you, Divine Servant of Ahu'ena Heiau at Kamakahonu to share Divine Messages for Good and Helpful benefit to 'Ōiwi, all mankind, the planet and all life upon the planet. By prescription from Akua, you are asked to help Akua heal the planet and all life upon the planet for you teach of Ke-au-lama, the Age of Light, now dawned upon the planet beginning in Hawai'i.

We wish to convey to you Words of Light in the understanding of the history of the Heavens; the cosmology of 'Ōiwi that tells of the identity and sacred knowledge concerning the sacred components such as that identified in the west as the Black Hole.

What is being revealed here is that by way of the conveyances of Akua through you Lamakū and Kahu of Ahu'ena Heiau, a new way of understanding a look into the Heavens and the whole identity of the Heavens by Akua by the spirituality of 'Ōiwi is beckoning mankind upon the planet.

Why Mauna a Wakea is indeed the sacred pinnacle for Hawai'i and the planet will be told. Why no further telescopes are necessary here nor allowed here will be told. Akua has spoken by the voice of the Royal Messenger and Great One near Akua in the Heavens as to what is at hand by Akua now.

The Age of Light heralds that which is the new beginning; a rebirth for the planet and all life upon the planet. It is the birth of the New Age of Light and Change of World Order. What arrives is the Era of Peace, Love and Harmony for all of mankind and the planet.

The creation of the Earth -- very old present planet -- began in the Pacific. 'Ōiwi are Akua's Firstborn of Races and 'Ōiwi helped Akua lay the tracks for what became all faiths from the Divine Pacific Sea.

Akua, with the assistance and presence of the Divine Seven Identities honored as Kāne, Kū, Lono, Kamaloa, Hina, Laka and Pelehonamea, caused the progression of life by Akua in the Pacific in the lands first known as Kaluaokalani translated as The Second Heaven.

You, Lamakū o Hawai'i and Kahu o Ahu'ena Heiau are asked to teach the cosmology of the First Faith of 'Ōiwi at Kamakahonu and upon the planet. As Mauna a Wakea is the utterly Divine Connection between the life of the Heavens and the life created by Divine Creator Akua Manamana of the Heavens, it is Sacred Domain.

All mountaintops are the sacred domain in the same way for the good and blessings upon the planet and all life upon the planet.

'Ōiwi are known as Firstborn of Akua. They are the only Ones of the Earth that have not forgotten that "The Earth is the Lord's and the fullness thereof...." Psalms 24:1.

Akua wishes to guide the planet and all life upon the planet back to full health and long and successful life. Life eternal upon the Earth is possible by the Most Divine Gift of Akua in Keaulama; Known also as the Soul Light Era spoken of by Master Zhi Gang Sha of China; Great Divine Healer and founder of the Tao Academy and the Love, Peace, Harmony network upon the planet.

Akua wishes to bring this Gift from Heaven's realms to all life of Earth's realms.

The Light creates movement and ongoing healing upon the Earth. Akua wishes to begin this in the largest way for the New and Healing Planet in Hawai'i where life began upon the first and very Old planet so very long ago.

**This is to be known as the creation of the Kingdom of Akua or the Kingdom of God upon the Earth. Akua begins this by guidance from Mauna a Wakea Akua's Holy Mountain and pinnacle of Kaluaokalani, the Second Heaven in the Pacific.**

**Divine Creator calls for the restoration of the Kingdom of Hawai'i already begun by Leader and Ruler identified and chosen by Akua, Ali'i Nui Mō'i Edmund K. Silva, Jr. Pākā.**

The Governor of Hawai'i and all offices of note have been informed of these movements occurring in time.

## II. Nā Hua'ōlelo i Ka Lama o Nā Kūpuna o 'Ōiwi Kau i Ka 'Ihi Words of Light of the Most Revered Ancestors of 'Ōiwi

Kaloko-Honokōhau served as the northern boundary of lands of great sacredness to 'Ōiwi and to all mankind. Kaloko on the north and Hōnaunau at the south enclosed the intensely sacred lands dedicated to Akua (Divine Creator). Within these lands were and are Ahu'ena Heiau in Kamakahonu.

At Pu'u is the sacredness focused and identified as the heart of Kaluaokalani, translated as -- The Second Heaven. While Pu'u is identified as the heart of Kaluaokalani, truly, the mountain-to-shoreline trails of the north Kona coastline "hold" the true history of the "heart" of Kaluaokalani. Kaluaokalani is ALL of the Hawaiian Islands extending northward through the northwestern Hawaiian Islands. Kaluaokalani became the Kingdom of Hawaii unified by Kamehameha-the-Great.

These land points have always been honored especially for bordering the lands held as the sacred repository for all 'Ōiwi from time immemorial.

When Kamehameha-the-Great unified the Kingdom of Hawaii by Akua Manamanaloa (Most High God), he was the Chosen King and Leader of his people by Akua. Akua blessed and provided for the success of his efforts for 'Ōiwi, his Beloved People. Kamehameha-the-Great unified the islands and took special care of the repository of the especially sacred lands of the ages.

Kamehameha-the-Great comprehended that He was the representative of Most High Akua, Divine Creator, and sought to procure the hearts of his people in this belief. He ordered the conversion of the centuries-old beliefs held in the first faith of 'Ōiwi in the Pu'uhonua o ka 'āina and He and his forces stood in battles to defend these changes. A large battle took place at Kaloko-Honokōhau where many lives were lost believing the way they were taught to believe; in the way of the faith they lived.

The national park staff of Kaloko-Honokōhau that desired a blessing of Akua upon all involved in a land-clearing episode in 2014 are to be honored for seeking this Goodness and Blessing of Akua. **This Instance Was Chosen By Akua** to be the focal point for the Great Light Dawning in Hawaii for the Planet. Here is Keaulama ~ The Age of Light.

At Kaloko begins the New Greatest-Story-Ever-Told.

Where certain lands are chosen as the Capital of the Kingdom of Hawaii, what does this tell us of the lands neighboring the Capital? Mea nui iākou. They are of Great Importance. Hohonu loa ka pīlina o nēia 'āina i nā 'Ōiwi. Hohonu ka pīlina o nēia 'āina i nā hoa kanaka ā pau. To the first people of the Pacific these lands hold deep meaning in connectedness. To all mankind, these sacred lands hold deep meaning in connectedness.

Ahu'ena Heiau is the first restored Heiau (Temple) of worship of 'Ōiwi. Ahu'ena Heiau is the first Temple built upon the Earth to give honor and give all praise and glory to the Source of Life

of 'Ōiwi. The Source of Life of 'Ōiwi is the Source of Life of all Mankind. 'Ōiwi are the Firstborn of Akua; the first souls of the firmament created by Akua in Kaluaokalani in the Divine Pacific Sea.

Akua names 'Ōiwi as his Firstborn, Ka Hiapo, for they helped Akua lay the tracks for what became all faiths of the Earth. Ka Hiapo reflect the honor Akua bestowed upon 'Ōiwi for the special help they provided to Akua in Kaluaokalani. Akua made a promise to 'Ōiwi. It is the promise Akua keeps.

The lands between Kaloko-Honokōhau and Hōnaunau are SACRED AND VITAL LANDS OF AKUA for history to 'Ōiwi and all mankind. These lands constitute the sacred heart of what became the remnant of the Great Continent of Mū that flourished with great populations over time and sank over time. This history would not be known without the quality and presence of yourself, e Lamakū o Hawaii and Kahu of Ahu'ena Heiau -- as One of your Nation of 'Ōiwi o Kaluaokalani. This history would not be known without Akua Manamanaloa's Gift of these Words of Light by way of your Ancestors who uphold the Highest Light of Akua at Kamakahonu.

AHU'ENA HEIAU IS THE FIRST RESTORED TEMPLE IN HAWAII AND WAS THE FIRST TEMPLE BUILT UPON THE EARTH. AHU'ENA HEIAU IS THE ONLY TEMPLE UPON THE EARTH RESTORED WITH THE LIFE OF THE SPIRIT OF MOST HIGH AKUA MANAMANALOA. AKUA CREATED THE EARTH WITHIN DIVINE PACIFIC SEAS. AKUA HAS BEGUN THE GREAT GIFT OF THE REBIRTH OF EARTH PLANET AGAIN IN THE DIVINE PACIFIC SEAS HERALDED BY THE HŌAILONA OF **'OMAKAOLAHOUKALUAOKALANI**, OFTEN REFERRED TO AS FISSURE 8.

UPON AHU'ENA HEIAU IS KA LANA NU'U MAMAO, THE GREAT ORACLE TOWER THAT REPRESENTS MAUNA A WAKEA; THE TALLEST MOUNTAIN PEAK OF THE EARTH MEASURED FROM THE BOTTOM OF OCEAN'S DEPTHS. WHAT IS THE ORACLE BUT THE SACRED CONNECTION POINT BETWEEN DIVINE AND MANKIND. HERE IS THE REPRESENTATION OF THE SACRED CONNECTION POINT BETWEEN DIVINE AND MANKIND IN MAUNA A WAKEA. UPON MAUNA A WAKEA, HERE IS THE ULTIMATE SACRED SPACE FOR THE LIFE OF THE PLANET AND ALL LIFE UPON THE PLANET. HERE IS THE ULTIMATE STAIRWAY OF LEVELS OF SACREDNESS CARED FOR BY SACRED APPOINTED ONES BY AKUA.

THIS HAS BEEN THE PLACE TO HONOR AND GIVE THANKS TO AKUA FOR THE SACRED BALANCE BETWEEN AKUA AND AKUA'S CREATION OF PLANET EARTH. MANKIND OFFERS PROFUSE LOVE, RESPECT AND HONOR AND KEEPS THE FIRST PEACE CREATED BY AKUA. AKUA BLESSES ALL OF AKUA'S CREATIONS OF THE LIFE OF ALL THE REALMS OF EARTH AND BEYOND.

# COUNTY OF HAWAII

## Proclamation

**WHEREAS**, Verda Leialoha Vida Roy was born on April 26, 1928 in Honolulu, Hawaii, the daughter of Elythe A. Alden Vida and Earle K. Vida; and

**WHEREAS**, Verda Leialoha Vida Roy was born on the same birth day as her husband Kahu David Keli'ihelamauna Roy, Jr., the Restorer of Ahu'ena Heiau at Kamakahonu, Hawaii, in the Temple's historic restoration beginning in 1975; and

**WHEREAS**, Kamakahonu was designated the first Capital of Hawaii, and Ahu'ena Heiau the personal Temple of Ka Mō'i Kalanipai'eakūniākea Kamehameha the Great; and;

**WHEREAS**, Verda Leialoha Vida Roy is honored in her lifetime as Ka Māmaika o Ka Lama, steadfast & worthy One of Two, who upheld the Flame-of-the-Highest-Light in the traditions of 'Ōiwi (native Pacific People) for the benefit of all 'Ōiwi and all humanity; and

**WHEREAS**, Verda Leialoha Vida Roy is the mother of four children, and as such is honored along with all mothers of Hawaii and the world; and

**WHEREAS**, Verda Leialoha Vida Roy is honored as Co-Founder, along with her husband Kahu Keli'ihelamauna Roy, Jr. of Hālau No'eau Kahelemauna, the House of Wisdom of the Mountain-Roaming-Chief. Hālau No'eau Kahelemauna is the First Home of Kamakahonu and the First Residence of the Capital of the Kingdom of Hawaii, unified by Ka Mō'i Kalanipai'eakūniākea Kamehameha the Great in 1810,

NOW, THEREFORE, I, HARRY KIM, Mayor of the County of Hawaii, do hereby proclaim September 13, 2018 as

### VERDA LEIALOHA VIDA ROY DAY

in the County of Hawaii and call upon our community to cherish the memory of this most Treasured lady, who was a true ambassador of Aloha throughout her life.

IN WITNESS WHEREOF, I have hereunto set my hand and caused The Seal of the County of Hawaii to be affixed. Done this 26<sup>th</sup> of October, 2018, in Hilo, Hawaii.



*Harry Kim*  
Harry Kim  
MAYOR

From: Kawika McKeague  
Sent: Wednesday, August 7, 2024 6:12 PM  
To: 221053-01 KS Keaouhou Entitlements  
Subject: FW: Draft EIS Keaouhou Bay Testimony 4 of 5 from Lamaku Ke Ola Magazine Article\_ July-August, 2014.pdf; Tengan&Roy2014.pdf; Kulana Huli Honua\_Introduction.doc

Categories: Yellow Category



Kawika McKeague, AICP  
Principal

From: Lamakū Mikahala Roy <[REDACTED]>  
Sent: Wednesday, August 7, 2024 4:42 PM  
To: Kawika McKeague <[REDACTED]>  
Subject: Draft EIS Keaouhou Bay Testimony

Aloha,

Please receive and include in my testimony important background information telling of the restoration of the first Heiau in Hawaii, the Pacific and the world. Here also is the creation of the first non-profit organization, Kulana Huli Honua - Foundation of the Search for Wisdom to advocate for sacred sites.

Mahalo nui loa,

Lamakū Mikahala Roy  
Kahunanui Ahu'ena Heiau  
Kamakahonu, Hawaii  
Ka Māmaika o Ka Lama





## ‘I Search for the Channel Made Fragrant by the Maile’: Genealogies of Discontent and Hope

Association for Social Anthropology in Oceania 2014 Distinguished Lecture

Ty P. Kāwika Tengan  
 University of Hawai‘i at Mānoa

Lamakū Mikahala Roy  
 Ahu‘ena Heiau and Kūlana Huli Honua

### ABSTRACT

*Ahu‘ena Heiau (whose name Burning Altar describes the sacredness of light) is deemed a paramount religious temple rededicated to Lono by Kamehameha the Great at Kamakahonu, the first Capital of the Hawaiian Kingdom. Restored in 1975 under the leadership of Kahu David Kahelemauna Roy, Jr., it is a place honoured by Kānaka ‘Ōiwi (Indigenous Hawaiians) in ways not recognized by the King Kamehameha Kona Beach Hotel on whose ground it now sits. Henry E. P. Kekahuna, noted Hawaiian scholar, produced a series of maps in the 1950s that documented this heiau (traditional place of ceremony) and other significant cultural sites. Kekahuna’s maps reveal a complex, contested landscape of overlapping contemporary and historic features, many of the latter invisible yet still alive in local hearts and memory. The Association for Social Anthropology in Oceania (and indeed anthropology at large) has analogously complex relations with the communities and the region it claims as its particular field of knowledge. The 2014 annual meetings, which convened in the Kamehameha Kona Beach Hotel, provokes a critical assessment of academic practice in light of indigenous sovereignty, genealogy, senses, memory, and place.*

Keywords: Indigenous anthropology, ASAO, Kamakahonu, Ahu‘ena Heiau, Hawai‘i.

*This paper was delivered as the 2014 distinguished lecture by Tengan at the ASAO conference at King Kamehameha Kona Beach Hotel, Kamakahonu, Kona, Hawai‘i, on 7 February 2014. Prior to and after the talk, Roy worked with Tengan to edit portions that specifically referenced her own story and the history of Kamakahonu. Roy offers her own mana‘o (thoughts) at the end of this essay.*

E hō mai ka ‘ike mai luna mai ē  
 ‘O nā mea hūmā no‘eau o nā mele ē  
 E hō mai, e hō mai, e hō mai ē!

On 17 January 2014, on the 121st anniversary of the illegal overthrow of the Hawaiian Kingdom, Mikahala Roy held a torch at Kailua Pier, where once stood a stone formation resembling a turtle. The ‘āima (land) that this hotel sits on – Kamakahonu (The Eye of the Turtle) – took its name from these stones, which now exists only as a memory.<sup>2</sup> Kamakahonu was the final residence of King Kamehameha I and the first capital of the Hawaiian Nation that he established. Kamehameha rebuilt the heiau of Ahu‘ena (Burning Altar), the traditional sacred structure that now serves as the backdrop of the hotel’s evening lū‘au, and dedicated it to Lono, god of healing, peace, and abundance. This was the first of modern-era heiau restored by Hawaiian men, done under the guidance of Mikahala’s father Kahu David Kahelemauna



Figure 1: Ahu‘ena Heiau at Kamakahonu, Hawai‘i, 6 February 2014. Photo by authors.

Roy, Jr. in 1975 (Roy 2014b). Mikahala inherited the station of the Kahu (Spiritual Guardian) of Ahu‘ena Heiau from her father, though since 2007 she has been in major conflict with the business now occupying these lands, and with no assistance from the State of Hawai‘i. Nevertheless, her station compels her to be ever present here; it is who she is in connection to this land. She explains, ‘The Kingdom of Hawai‘i of the Hawaiian Islands unified by Kamehameha I has ancestry – a long spiritual ancestry that holds all members unified’ (Roy 2014a). This genealogical unification, she states, ‘has the power to *transform* the energy of this day from one of somber reflection to proactive *hope* for a bright future for the people of Hawai‘i. The efforts for the true restoration of the Kingdom of Hawai‘i originally unified by Kamehameha the Great are underway’ (2014a) (Fig. 1).

Kahu Mikahala’s vision, shared via an email kāhea (call out), was entitled ‘Lands & Seas of Hope’. It recalls the tone and language of the late Epeli Hau‘ofa’s land- (and sea-) mark essay ‘Our Sea of Islands’ (Hau‘ofa 1993). Of course, the ASAO will know this work quite well since the vision came to Hau‘ofa as he left this conference – held at this very hotel – and drove over the expansive Kona landscape to Hilo in 1993. As he stated:

The drive from Kona to Hilo was my ‘road to Damascus’. I saw such scenes of grandeur as I had not seen before: the eerie blackness of regions covered by recent volcanic eruptions; the remote majesty of Maunaloa, long and smooth, the world’s largest volcano; the awesome craters of Kilauea threatening to erupt at any moment; and the lava flow on the coast not far away. Under the aegis of Pele, and before my very eyes, the Big Island was growing, rising from the depths of a mighty sea. The world of Oceania is not small; it is huge and growing bigger every day. (Hau‘ofa 1993:5–6)

The 2009 Association for Social Anthropology in Oceania (ASAO) distinguished lecturer James Clifford found in this and other writings of Hau‘ofa a set of ‘big-enough histories, able to account for a lot, but not everything – and without guarantees of political virtue’ (Clifford

2009:241), which for him pointed to 'a tangle of historicities rather than a progressively aligned common History' (2009:246). So too did he find 'hope, necessarily entangled with more ambivalent scenarios and dystopias' (2009:248). In a special issue of *Pacific Studies* focusing on genealogies of Indigenous anthropology, Hūfanga 'Okusitino Māhina paid tribute to Hau'ōfa and other important scholars whose passing put them 'behind us, in the past, yet before us, in the present' (Māhina 2010:168). Meditating on Indigenous Moana concepts of tā (time) and vā (space) in relation to the 'cultural and historical tensions . . . within and across social, intellectual, and artistic and literary genealogies', Māhina explained that:

genealogy is about people who cross paths in physical, emotional, and social ways, culturally ordered and historically altered through intersection and separation. . . . Like all exchange relations, within and across nature, mind, and society, genealogy embraces both conflict and resolution, with resolution itself a form of conflict. (2010:188–189)

Situating himself within this Native Pacific genealogy, Vicente Diaz took a more 'bottoms up' approach in clearing a way for an 'olfactory history' in his ode to Hau'ōfa that was playfully entitled 'Sniffing Oceania's Behind' (2012:326). The primary inspiration for Diaz's piece was Hau'ōfa's 1987 satirical novel *Kisses in the Netherlands*, wherein the author fictionalized and hyperbolized his real-life experiences and battle with anal fistulae as 'a way of turning society upside down and inside out and giving it a thorough cleaning' (Hau'ōfa 2008:145). Diaz (2012:328) also breathed new life into Lilikalā Kame'elehiwa's oft-quoted explanation of 'Ōiwi Maoli (Indigenous Hawaiian) conceptualizations of the past ('*Ka wā māmua*, or 'the time in front or before') and the future ('*Ka wā mahope*, or 'the time which comes after or behind') when she wrote, 'It is as if the Hawaiian stands firmly in the present, with his back to the future, and his eyes fixed upon the past, seeking historical answers for present-day dilemmas' (Kame'elehiwa 1992:22). In pointing to sensory perceptions of times below and behind, Diaz notes that 'smells are associated with things that are meaningful and people who matter with respect to the (ongoing) past and who, for whatever reasons, are not or cannot be captured or recorded in that supposedly more permanent record called written documents and the visual conventions that underwrite their various claims to authority' (2012:326–7). Rather than looking at big Histories (capital H), an olfactory sensing of the past 'allow[s] us to delve instead into the more chaotic social world of the subaltern' (2012:333). Brandy Nālamī McDougall (2014:8) adds that 'smell can be useful to articulate aesthetics in terms of a legacy or memory, as they often indicate presence despite absence or invisibility' (Fig. 2).

And so we return to Kahu Mikahala Roy, who took time to welcome a small group of us ASAO conferees to Ahu'ena Heiau on 6 February 2014. The stories she shared are not found on the hotel's website, or on the ASAO's 2014 Meeting Information website (although there we do find that we are surrounded by the 'three S's of sea, sand, and sun'). Kahu Mikahala has graciously allowed me to share some of her story with you all, and I want to acknowledge her presence in the audience tonight. I want to also thank Mikahala for restoring my own hope that meetings such as this one can in fact create meaningful connections that acknowledge and viscerally engage Indigenous time, space, and place – despite whatever other forms of intellectual inertia and settler colonial logics continue to characterize the ASAO and other organizations and departments that produce what Brodtkin, Moren, and Hutchinson (2011) have called 'anthropology as white public space'.

Yes ASAO, I love you and I hate you. Most people here are very warm and nurturing, and I owe a debt to the organization for helping me and a small group of Pacific Islander scholars flourish in a field that would otherwise see us only as objects. I want to say here that my



Figure 2: Kahu Mikahala Roy (standing) shares stories at Kamakahonu with (left to right, sitting) Tēvita Ka'i'i, Lisa Uperesa, Kalaniopua Young, Jacob Fitiseanu, Sa'iliemanu Lilomalava-Doktor, and Adrian Bell, 6 February 2014. Photo by authors.

critique is not aimed at individuals, but at structures that, well, stink. Blow-ups on listserves were old even when Geoffrey White and I wrote about this back in 2001 (e.g., White and Tengan 2001:383), and yet I continue to hear (second-hand since I am not on it) about new ones. Then there are other things, but I will not linger there. I will point out though that they suggest a broader culture of privilege, especially the privilege of not having to deal on a *daily* basis with the profound cultural, economic, social, and political consequences of colonization. I know it is hard work to be decolonial, and so I applaud the efforts of those in this organization that have tried to shift the ASAO in this direction. I thank you for giving me this time tonight, as well as the changes you have made, which include the election of Lisa Uperesa as the next Chair of the association, and the granting of the Pacific Islands Scholars Funds mini-grants to Islanders who wish to register on-site free of charge, as Kahu Mikahala did (Fig. 3).

Kahu Mikahala has so much to share, and I can only touch the surface of it tonight. For hers is a lifelong journey: as she told us yesterday, 'I search for the channel made fragrant by the maile'. The maile, which was the lei I was given and in turn gave to Kahu at the opening of this distinguished lecture, is an aromatic vine that is used to adorn and honour individuals, and it is ceremonially cut to represent the piko (umbilical cord) of a new home. I would like to now take you on my trip to Kamakahonu. It is worth noting that in contrast to the name of this 'āina (land), turtles actually have a much keener sense of smell than sight. While I speak, please pass around the container of 'inamona I have brought, which I will explain the significance of later, and the bag with the pa sakai (salt) and 'ōlena (turmeric). The latter are cleansing agents, which I may need after I get back to the significance of the 'inamona. For now, go ahead and smell them. Together, let us see if we might pick up a scent on the trail of genealogy.

#### THE PATH TO KAMAKAHONU

After finally giving up my boycott of the ASAO and agreeing to give this lecture, I was starting to think of how I could expand upon the points that Tēvita Ka'i'i, Rochelle Fonoti, and I made



Figure 3: Kahu Mikahala Roy, wearing a maile lei, Ty Kāwika Tengan, and Tēvita Ka'ili at the ASAO meeting, Kamakahonu, Hawaii, 7 February 2014. Photo by authors.

in our introduction to the special issue of *Pacific Studies* we co-edited in 2010 on 'Genealogies: Articulating Indigenous Anthropology in/of Oceania'. Incidentally, I would like to thank the board for designating it an ASAO special publication last year and for including it on the book display this year – better late than never! (I will say more about this later.) In our introductory essay, we suggested that 'articulating visions of anthropology's future, at least from an Indigenous Oceanic perspective, can be done only through genealogical work – the search for, production, and transformation of connections across time and space' (Tengan, Ka'ili, and Fonoti 2010: 140). As someone who does not have close family or community ties to Kona, I had my work cut out for me.

Thus I set about doing some genealogical work on the site (<http://www.konabeachhotel.com>) of the King Kamehameha Kona Beach Hotel. The first of those sites was the hotel's own website, which predictably featured pretty much just the three S's with Hawaiian structures providing a picturesque backdrop for those wishing to 'dine with a view', 'enjoy a [poolside] tropical drink', have a 'Hawaiian wedding on any budget', or 'capture the Hawaiian spirit'. Of course, like me, I am sure that most of you were dedicated to being good anthropologists and so made that ethnographic commitment to scroll down the page and click on 'culture and history'. There we read: 'King Kamehameha the Great established his royal residence' at this site, and rededicated 'Ahu'ena Heiau, a temple . . . to Lono who was the Hawaiian God of peace, agriculture and prosperity. Here, on The Big Island, Kamehameha the Great lived and conducted matters of government, until his passing on 8 May 1819. Indeed, our Big Island hotel owes quite a debt to our island's rich history and culture'. Quite a debt indeed, which, as I will point out soon, is repaid in only a way that a settler colonial institution could. (Which is: not.) But onwards first with our ethnog-clicking!

When one clicks on the first occurrence of 'Ahu'ena Heiau, nothing happens, though the URL changes to add on '#Heiau' after 'historical.htm'. Was there a separate webpage that used to tell another story, or were these two always one and the same? In any case, if you are an ethnographer, as I am, you will persevere in the search for deeper understanding and click on the next 'Ahu'ena Heiau' hypertext, which takes us to [ahuna.net](http://ahuna.net), replete with the translated writings of 19th century Hawaiian authors such as John Papa 'Ī'i, accounts and sketches of

European and American explorers and missionaries, photographs from the 1950s to 2011, and a relatively empty 'Outreach' page that says only 'Coming soon . . .'. But it features images of nā koa, Hawaiian men who have taken up warrior traditions as a part of the broader Hawaiian men's movement and Hawaiian cultural nationalist movement I have written on (Tengan 2008). Back to the home page, which starts off with the following message:

The Ahu'ena Heiau rock platform base, perimeter wooden fencing, Anu'u Tower and an uprooted ki'i were all damaged from the recent tsunami. Ahu'ena Heiau, Inc. has surveyed the damage, consulted the State Historic Preservation Division and is working closely with a qualified historical site restorations coordinator. We are currently seeking grants to repair and restore the tsunami damage.

The statement seems to have been written in order to prepare the reader (or potential visitor, or visiting anthropologist) for a site of disrepair, but that somebody – Ahu'ena Heiau, Inc. – is doing something about it.

The text of the home page goes on to note that Ahu'ena was both a religious temple and meeting house for Kamehameha's inner circle of advisors and that three major events occurred there, including his death in 1819, the subsequent ending of the 'aikapu traditional religious-political system, and the landing of the first missionaries in 1820. (This perhaps is *not* the main point that others would try to convey about Ahu'ena Heiau; rather, we must recognize that it is a site steeped in mana and meaning for the people who visit.) It goes on to note that 'an accurate restoration project [was] undertaken in the mid-1970s', and '[a] community based committee Ahu'ena Heiau Inc., formed in 1993 to permanently guide the restoration and maintenance of this national treasure'.

When I went to the Historical Photos page, I came across an image taken by Theodore Kelsey in 1950 of a Mr. Henry E. P. Kekahuna standing on a 'large stone in the middle of the house of Hale Pua Ilima, in which King Kamehameha breathed his last'. That is all the information we are given about Mr. Kekahuna, but many of us in the field of anthropology and archaeology recognize him as an important archivist, scholar, historian, and community archaeologist, ethnologist, and ethnographer from Maui who had one leg, yet travelled across the islands with the assistance of his friend and colleague Theodore Kelsey, a non-Hawaiian who was nevertheless fluent in the Hawaiian language and committed to matters of cultural and historic preservation. Together they mapped heiau and other cultural sites and interviewed elders about histories of the land, and in Kona they were guided by Nāluahine Ka'ōpua the revered kupuna and konohiki (land overseer) of the Lanihau ahupua'a (district) that we are in. Contemporary 'Ōiwi archaeologists and anthropologists see Kekahuna as an important ancestor in our genealogy (Kawelu 2013). His appearance during my search of this website suggested that I was being guided on the right path.

#### KEKAHUNA'S MAPS

I pursued this path by doing a Google search on Kekahuna's maps, which I know have been used by a number of different 'Ōiwi groups and organizations in their efforts to protect and restore sacred sites. To my surprise, I found that the Bishop Museum had recently digitized and posted a number of Kekahuna's maps, prominent among them those that he drew of Ahu'ena, Kamakahonu, and Kaiakeakua (Sea of the God), today referred to as Kailua Bay. The detail in these maps and the amount of descriptive text are astounding, evidence of the care and purpose with which they were produced – to keep the histories of these places alive in the memories and hearts of all of Hawai'i's people, and particularly its 'Ōiwi (Fig. 4).

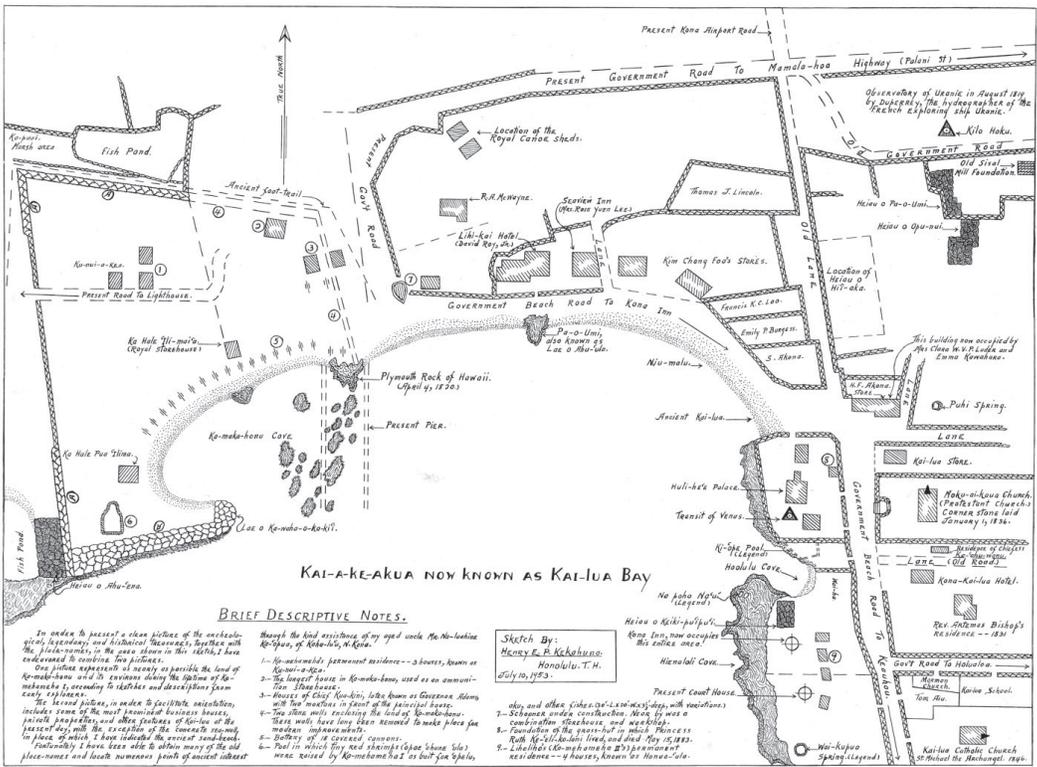


Figure 4: 1953 map of Kaiakeakua, now known as Kailua Bay. Henry E. P. Kekahuna, Bishop Museum.

322 I Search for the Channel

Though historical, Kekahuna's documentation was not of what used to be there, but rather what is still there, even if no longer visible to the eye. Take, for example, the map he did of Kaiakeakua in 1953. In his Brief Descriptive Notes, he writes:

In order to present a clear picture of the archaeological, legendary, and historical treasures, together with the place-names, in the area shown, I have endeavored to combine two pictures. One picture represents as nearly as possible the land of Ka-maka-honu and its environs during the lifetime of Kamehameha I, according to sketches and descriptions from early explorers. The second picture, in order to facilitate orientation, includes some of the most prominent business houses, private properties, and other features of Kai-lua at the present day. . . . Fortunately I have been able to obtain many of the old place-names and locate numerous points of ancient interest through the kind assistance of my aged uncle Mr. Na-luahine Ka'opua, of Kahalu'u, N. Kona. (Kekahuna 1953)

Yet even to acknowledge 'two pictures' is to underplay the multiple dimensions of time and space he reveals as he points out sites associated with the 15th century chief 'Umiāliiā, an ancestor of Kamehameha, as well as the grass hut where Kamehameha's great-granddaughter Princess Ruth Ke'elikōliāliā died in 1883. An 'ancient foot-trail' intersects – intersects – with the 'present government road' that passes a 'schooner under construction' for Kamehameha. Continue west on the Government Beach Road to Kona Inn and you pass the Seaview Inn of Mrs. Rose Yuen Lee and Kim Chong Foo's Stores. I could go on, but you get my point – multiple histories, geographies, and genealogies of people and place where the Indigenous is co-present, or ever-present.

Kekahuna and Kelsey also penned a serial on 'Kamehameha in Kailua' that ran in *The Hilo Tribune Herald* from 28 February through 5 April 1954. In it, Kekahuna reproduced a few of his maps to go along with the stories he and Kelsey told. Opening the series with an ode to the land, they wrote:

Basking in the sun of the somewhat arid coastal region of the district of Kona, beloved by Hawaiians for its calm, variegated 'opua or horizon-clouded sea, teeming with fish, in the tranquility of prehistoric King 'Ehu. . . lies the prominent historic village of Kailua Kona. By day it is famed by Kona's cooling sea-breeze, the 'Eka. . . . By night the sweet scented land-breeze the Ke-hau, suffuses Kona with its cool breath from the mountain of Hualalai. (Kekahuna and Kelsey 1954:8)

On 5 March, after describing the various structures and formations at Kamakahonu, they describe the persistence of mana in the land:

When at last it became necessary to demolish Ka Hale 'Ili-Maria [Kamehameha's Western-style storage house], foreigners and natives alike were afraid to do so, lest its mana, or spiritual power, should bring calamity upon them. The work was finally undertaken after a suitable ceremony was performed by old Mr. Na-luahine Ka-'opua. . . . whose great grandfather, La-na-i, last high-priest of the heiau of Ka-pua-noni, in Kaha-lu-u, is of the blood of Hawaii's ancient high-priesthood. Na-luahine also held a ceremony before the blasting of a nearby rock in Ka-maka-honu Cove. Thus were reconciled the powers of the unseen realm of spirit. (Kekahuna and Kelsey 1954:8)

The 'old Nāluahine Ka'opua' – the kupuna (elder) and kahuna (ritual specialist) – was the source of 'like (knowledge) and mo'olelo (histories, stories, legends) that informed

Kekahuna's maps and narratives. More needs to be said and understood about the position that cultural workers such as Kekahuna and Kelsey and elders such as Ka'ōpua found themselves in as mediators and mitigators of the forces of change and transformation. But the scent of the Kēhau breeze (or is it the 'awa?) tells me that I must move on in this journey and return to the trail that brought me to tonight.

#### AHU'ENA ARRIVAL

Knowing that I needed to connect with people who were actually caring for Ahu'ena Heiau, yet not knowing who they were, I consulted my ethnic studies colleague Davianna McGregor, an 'Ōiwi historian, activist, and mentor to me. She suggested I contact Mikahala Roy who was Kahu of the heiau but had recently gone through a major dispute with the hotel. I thus emailed Kahu Mikahala introducing myself and my project and asked if we could talk about Kamakahonu. She immediately responded by acknowledging our connection through another 'Ōiwi woman professor who has guided me, Noenoe Silva. I explained that one purpose of this talk was to underline the need for all anthropologists and scholars, Native or non-Native, to both account for and be accountable to the deep cultural and political histories of place wherever they go, be it for research or for a conference. She then forwarded me a compilation of emails, testimonies, and songs she had composed in response to events that took place since 2007, both at the hotel and throughout the islands more generally. When we finally spoke on the phone, it was as if we had known each other for a very long time, connected by those genealogies of descent as well as dissent. I asked her if she would be free to meet me when I arrived in order to properly carry out the protocols of introduction and homage to the heiau, and also if a small group of Pacific scholars could join. She gladly agreed, and I set about making plans and preparations for the ho'okupu (offering) that I would give on behalf of the ASAO.

At noon on 6 February, Lisa Uperesa, Tēvita Ka'ili, Kalaniopua Young, Sa'ilemanu Lilomaiva-Doktor, Jacob Fitiseanu, Adrian Bell, and I watched dolphins spinning in the air as we awaited the arrival of Mikahala at the entrance of Ahu'ena Heiau. I remembered that she had mentioned Nā Pōhaku Kālai a 'Umi by the banyan tree as our meeting location, which someone eventually pointed out on the other side of the hotel. I went to find her and passed a Hawaiian male employee of the hotel who gave me a fairly unfriendly look as I walked by. (I later found out from the others I left that he was questioning their presence there – though I highly doubt he was asking the same of the other tourists that were visiting). As I approached the banyan tree, Kahu Mikahala came out with a huge smile, wearing her ceremonial white kīhei. We embraced with the honi, the pressing of noses and exchanging of hā (breath) that connected us as 'Ōiwi. It was a true joy.

Together we walked to the heiau, passing the employee who maintained an emotionless face and said Mikahala's name curtly, to which she replied with a true greeting of aloha. I could feel the tension there, and I knew a story would come later. When we arrived at Ahu'ena, everyone introduced themselves while I put on my own white kīhei. Mikahala had told me before I arrived that the best offering would be a chant, but I had also brought some physical offerings in the forms of 'inamona, a kukui (candle nut) relish made with salt, a small ipu (gourd) container bound with cordage, and mashed 'awa root in a gourd cup with holder. Kalaniopua had poi, a banana, water, and corned beef, and Tēvita had a lei.

Mikahala directed us down to the sand and rocky area just below the heiau where we stood as she first gave a chant and then allowed us to offer ours. Mine was a prayer that called out to the different forms of Lono for blessings, knowledge, strength, righteousness, patience, courage, protection, guidance, and mana, and that introduced us and the ASAO as a group that

has come in respect, honor, and aloha for this 'āina. Tēvita and Kalaniopua also offered up chants, and we stood in silence acknowledging the sacredness there.

After a time, Kahu Mikahala took us down closer to the water's edge and told us a story of three turtles that had come ashore some time ago. The first, a large and aged turtle, came up out of the water with a long crack in its shell. It receded back into the sea. Soon, a second, smaller and younger turtle came upon the shore; its shell was whole. A third honu appeared that was a baby, young and vigorous. With tears in her eyes, Kahu Mikahala explained that this story was a ho'āilona (sign) that to her represented hope for our people. A Pacific nation is presently divided. It will be unified for a future of health for the young. The smell of the ocean, salt air mixed with fish, mingled with the aroma of the roasted kukui nuts I was still holding.

Kahu Mikahala explained that by Spiritual Guidance, no physical ho'okupu are to be made at this time. Instead, ho'okupu of Oli (Chants) are welcomed. She explained that she would take the physical ho'okupu that we brought, for at this point in time when Ahu'ena Heiau and Kamakahonu are under foreign occupation, leaving a physical offering would make the wrong kinds of things grow. Thus, the clear communication of our chants to the Kāpuna would be the most appropriate offering. I thus offered another prayer to Lono asking for growth and nourishment. At the end of our time there, Jake, Sa'ili and Lisa led the group in the offering of the Samoan song of gratitude 'Fa'afetai':

Ua fa'afetai, ua fa'afetai  
 Ua malie mata i va'ai  
 Ua tasi lava 'oe, ua tasi lava 'oe  
 I lo'u nei fa'amoemoe<sup>3</sup>

After leaving Ahu'ena Heiau, Mikahala took us to the rock wall boundary between the hotel and the neighbouring property, which was formerly held by the missionary-commerce family of the Thurstons whose scion led the illegal overthrow of the Kingdom of Hawaii. There she produced a large printout of a Kekahuna map of Ahu'ena and proceeded to tell us the stories of the 'āina and the efforts to educate the new land owner, Microsoft billionaire and Seattle Seahawks owner Paul Allen (Fig. 5).

Eventually we sat on the grassy area just outside Ahu'ena Heiau and had a wonderful talk story. Mikahala showed us a picture of her father Kahu David Kahelemauna Roy, Jr., who worked in strong and highly visible ways to save and restore sites (see Roy 2014b). She told of how Amfac, one of the 'Big 5' sugar companies that dominated the Territory of Hawaii (Kent 1993), agreed to restore the heiau in exchange for community support for the renovation of the King Kamehameha Hotel in 1975. Kahu David worked with Bishop Museum as the superintendent of the project, selecting the men who were all of heritage and bloodline of 'Ōiwi. Roy served as overseer for the restoration of Ahu'ena Heiau by the guidance of Akua (God) – the element neither the museum nor their staff could provide. Life in the title of Kahu is the significant outcome for the people as the restoration of Ahu'ena Heiau is the significant outcome for Hawaii (Fig. 6).

Mikahala is the second of four daughters who took keen interest in her father's work; she even sat on Nāluahine Ka'ōpua's lap when she was only one at her 'āha 'āina piha makahiki (first birthday celebration). These men inspired her to keep the sacred. Over the years she has joined other community members in fighting off multimillion dollar developments that would threaten such sites all along the Kona coast. She also protests the illegal occupation of our Hawaiian Kingdom and any efforts such as the Akaka Bill or Kana'i'olowalu that would have us forget the first true capital of Hawaii at Kamakahonu.

While Mikahala's father was alive, his priority was the life and care of Ahu'ena Heiau. With colonization and the colonized behaviour of 'Ōiwi, the road has not ever been smooth.



Figure 5: Kahu Mikahala uses a Kekahuna map to retell the history of the lands that, for her, remains the priority over all changes brought in time by present-day landholders. Kamakahonu, Hawaii, 6 February 2014. Photo by authors.



Figure 6: Kahu David Kabelemauna Roy, Jr. Kamakahonu, Hawaii, early 2000s. Photo courtesy of Kahu Mikahala Roy.

Ahu'ena Heiau Inc. (AHI) formed in 1993 but was inactive, so the community formed Kūlana Huli Honua (KHH) in 1999. For over a decade, the hotel offered KHH a small office to develop cultural services to benefit Ahu'ena Heiau and the people. Mikahala and the organization members (including teachers and historians) led property tours that benefited local and visitor alike.

However, in 2007, a major disagreement arose between KHH and the Hotel (Pacific News Service n.d). After that point men from AHI breached their support of the spiritual tradition of 'Ōiwi. The non-profit organization positioned itself to guide the discourse on how

culture and history should be represented here when a new hotel operator purported to 'own Ahu'ena Heiau'. Kahu Mikahala and Kūlana Huli Honua led a resistance in 2008 contesting the environmental impact study done for proposed renovations, which they knew would disturb iwi Kūpuna (ancestral remains). From 2007 to 2009, although these efforts failed by American legal standards, they were highly successful in building unprecedented networks for the people. The hotel proceeded with their plans. Shortly after the newly renovated King Kamehameha Kona Beach Hotel reopened, the 2011 tsunami caused massive water damage to the hotel (Rechtmann and Poepoe 2008).

Mikahala persists, upholding her kuleana as Kahu to bring people to connect to the Kapitala Mua o Hawai'i and to honor Ahu'ena Heiau. Important matters have progressed loudly and quietly here, she told us as we walked to visit the vault where iwi Kūpuna unearthed in recent years had been re-interred. When Mikahala stood on the pier on 17 January to pray for transformation and unity on the day of the illegal overthrow of the Kingdom, a Micronesian man joined her. Few words were exchanged; they communicated in silence with gestures and nods, feeling and sensing the purpose of each other's co-presence there. When her vigil was finished, they had a brief conversation. She asked him if wisdom keepers still maintained sacred sites where he was from, and he said yes. She thanked him for Mau Pūlūg and the gift of voyaging, which had, returning us back to Hau'ōfa, reminded us of the 'Ocean in Us' and 'Our Place Within'.<sup>4</sup>

## CONCLUSION

The 'inamona, which I can smell from here, reminds me that I still need to explain its significance. On the heiau, as a ho'okupu (gift), it was meant to represent enlightenment and knowledge that comes in Lono's form of the kukui, or candlenut, which traditionally would have been lit as the torch held at a vigil such as the one Kahu Mikahala carried out. I also came across another meaning for 'inamona when going through Henry Kekahuna's unpublished papers at the State Archives. In a furiously written and rigorously researched rebuttal to a group of non-Hawaiian historians who questioned the veracity of the birth date of Kamehameha as reported by 19th century 'Ōiwi scholar Samuel Kamakau, Kekahuna wrote:

the writer [referring to himself in the third person] is prompted to bring to your attention these bits of pungent kukui-nut condiment (ina-mona) with little pinches of salt added that will cause the lips of the reader to smack with each mouthful. (The roasted kernel of the kukui, or candlenut, called ina-mona, is a delicacy that only a Hawaiian can appreciate. It represents the actual truth). (n.d.:1)

I would amend his comment by noting that some Hawaiians in fact will not appreciate it and that there are non-Hawaiians who might. It all depends on how far you are willing to stick your nose in it. But do not get too fond of it – 'inamona in excess is also known to be a powerful laxative. Then again, perhaps that is what we all need – a good enema!

Let me offer one example of a blockage that could use some clearing.<sup>5</sup> On 14 January 2011, Tevita Ka'ili (on behalf of himself, Rochelle Fonoti, and me) sent an email to the ASAO leadership to request use of one of the conference rooms at the upcoming February meetings in Honolulu for the launching of our special journal issue on genealogies of Indigenous anthropology that I referenced above. While we knew it was a last minute request, we had only just found out from the editor of *Pacific Studies* that the issue was going to be ready, and we were hopeful that the association would want to celebrate the publication of this first collection of writings edited and authored by Indigenous anthropologists, with contributions from

non-Indigenous allies. Unfortunately, the very quick response we received was that 'there is no spare room or break in the program'. This, for me, was the last straw in a long line of ASAO insults that I and other Pacific Islanders had suffered over the years, experiences that might lead us to recall some of the earliest writings of Hau'ofa, in particular his essay 'Anthropology and Pacific Islanders' and poem 'Blood in the Kava Bowl' (both written in 1975 and reprinted as the first and last chapters in his 2008 book).

At first, Tēvita, Rochelle, and I were not going to make a big deal about it – we and the communities we came from were *used* to that kind of treatment. But the more we thought about it, the angrier we got. We had originally approached the board with the hope that the vision of anthropology (from below/behind/in back) that we were promoting was one that could branch out and expand in truly Hau'ofan ways (above/forward/in front, and back again). Instead, we confronted the most banal of colonial blockages: deadlines, schedules, and costs that defined who belonged and who did not in space and time. For Indigenous anthropologists, the very first thing you do anywhere is to recognize and acknowledge the sovereignty and mana of *whose space* you are in at *all times*. The affront was not so much to us as individuals but more importantly to all those people and places who precede and will succeed us, those who hold us accountable to carry on the unfinished business of resisting occupation, surviving settlement, persisting as Islanders, and striving for pono (justice, righteousness, balance) in Oceania. We did not discuss all of that explicitly, but it is the truth we embody, and it is what leads to the visceral reactions in our guts when we sense that bad history is happening all over again. And it does . . . So, I decided to take my leave of ASAO, with one parting email gift: "Thanks for the effort you have made to accommodate our request. Though it is unsurprising, it is nevertheless disappointing that there is no room for Indigenous anthropology at ASAO. Enjoy your time in Waikīkī".<sup>6</sup>

With much ambivalence, I accepted the invitation to give the Distinguished Lecture after a considerable amount of discussion with Lisa Uperesa, Paige West, and Lamont Lindstrom, who all assured me that it would be okay (even welcomed) if I shared my thoughts on what I saw were major issues in ASAO that needed to be addressed. I had originally planned to focus on the failure to book launch (at the conference site), but to be honest I was not finding much that was hopeful coming out of that story. Saying this, I acknowledge that Edward Hviding and Paige West had been very proactive in their capacities as past Chairs in trying to steer the organizational canoe in the right direction, most explicitly seen in West's 'From the Chair' message in the April 2013 ASAO newsletter. But I was away from the association, and I was still unconvinced that there was enough commitment to 'mak[ing] sure that ASAO is a welcoming and productive place for our Pacific Islander colleagues' (West 2013:5), even if our special issue was voted in as one of four new ASAO publications that year.

Facing something of a writer's block, I eventually tried to put into practice the approach to Indigenous anthropology that our collection was arguing for all along. And it was there in Kamakahonu's 'tangle of historicities' of land, sea, family, and nation that I found *ea* – the Hawaiian word for sovereignty that also translates to life, breath, and 'to smell'; coincidentally, or not, *ea* (with the glottal stop) is the term for the Hawaiian Hawksbill turtle, and it also means to smell (Pukui and Elbert 1986:36). I thank Kahu Mikahala for allowing me to see and smell that moani ke ea o Kamakahonu i pūia me ka maile/wind-blown is the maile-scented breath of Kamakahonu.

Finally, I want to sincerely thank the ASAO for bringing us here in this space of entangled and ambivalent histories. I have a new thought on Hau'ofa's revelations in 1993 – perhaps it was not only the road he was driving on and not only the aegis of Pele, but also the time he spent here with the kūpuna (ancestors) and akua (gods) from Kamakahonu that gifted him with his vision. Three turtles, smelling their way to the shore, two genealogies of discontent that might be transformed in the lands and seas of hope.<sup>7</sup>

#### COMMENTARY FROM KAHU MIKAHALA ROY

The restoration of Ahu'ena Heiau provides a strong reminder to future generations that such work is important. It is for this reason that business leaders associated with American Factors created lawful land covenants with the state of Hawai'i to abide 'with these lands' throughout changes in time. The Spirit of the memorandum of agreement requires all land tenants to promise to uphold respectfully and with honor the dignity of the lands of ke Kapitala Mua o Hawai'i (First Capital of Hawai'i).

All ensuing landholders here since Amfac have honored these land covenants. All until the current landholder, Pacifica Hotels now managed by the Marriott Courtyard took up tenure in 2007. This landholder disrespects the sacredness and sanctity of Kamakahonu.

The Kingdom of Hawai'i abides at Kamakahonu. Here, over the years, by our actions and by our words, we have told of the generational love given by 'Ōiwi for Akua, for their ancestors, for their rulers, for the love for their beginnings in heritage and hope for their country. We have shared the stories of inspirational acts in history and the customs of 'Ōiwi to inspire future leaders among 'Ōiwi. Kamakahonu's light is the beacon for the world that it has always been. We move into times of great hope for the planet and all life upon the planet. Symposium attendees are all seated in the cradle of transformation: A fireplace in the Home of Ka 'Īlālā-ole (Supreme-One-Without-Branches or Divine Creator).

Ancestors of 'Ōiwi (first people of the Pacific) paved the way for those of us who follow, to help and heal all life on the planet by fostering aloha kekahi i kekahi (love one for another). So let us pay attention here at Kamakahonu. Ancestral wisdom shares that giving your essence here, where you feel you can, aids the abiding cumulative light of healing for the world (Fig 7).

E 'oni wale nō 'oukou i ku'u pono, 'a'ole e pau  
Go on in the righteousness I have followed; it is not finished.  
–Kamehameha-the-Great.



Figure 7: Kahu Mikahala Roy dances a hula at the reception following the distinguished lecture at the ASAO meeting, Kamakahonu, Hawai'i, 7 February 2014. Photo by authors.

## ACKNOWLEDGEMENTS

Tengan would like to thank Paige West and the ASAO Board for the invitation to speak, Davianna McGregor for suggesting that he contact Kahu Mikahala, Puakea Nogelmeier for his insights into the relationships between Henry Kekahuna, Theodore Kelsey, Nāluahine Ka'ōpua, Kathy Kawelu for her observations of the unique qualities of Kekahuna's maps, and Geoff White for providing a recording of the talk and for his years of mentorship and friendship. We would both like to thank an ASAO reviewer for productive comments, and Lamont Lindstrom for his work on shepherding this article through the publication process. Finally, we acknowledge the āina of Kamakahonu, and the kūpuna, 'aumākua, and akua whose 'ike and mana inspired this essay.

## NOTES

1. Tengan opened the Distinguished Lecture with the chant 'E Hō Mai', which was composed by Edith Kanaka'ole and translates as 'Grant the knowledge from above/The hidden wisdom of the songs/Grant it, grant it' (Tengan translation).
2. Roy observes: the shapes of turtles found in the lava of the pāhoehoe islets of Kamakahonu, later referred to by missionaries as 'The Plymouth Rock' of Hawai'i, are significant to history. Mrs. Chee, a respected teacher of Kailua Elementary School as a part of her instruction, would walk her students down to the pier, which was then upheld by wooden pilings, to acknowledge the significance of this place.
3. Sa'ilitemanu Lilomaiva-Doktor provides the following translation: 'We appreciate thank you, we appreciate thank you/Our eyes have seen and are satiated/You are our one and only, one and only/In our hearts and souls'. She also notes that 'The song is sung always at any gathering of Samoans between the host and visitors where a reciprocal exchange of greetings, dances, gifts and good wishes are usually done. At the end of any excursion and visitation, to show the guests' appreciation of the wonderful time, beauty, and hospitality exhibited by their hosts they sing this song to show their appreciation, love and gratitude for the people and place they have just been guests of. The song also speaks of hope and continuity although it is not explicitly stated' (email to author, 20 February 2014).
4. Particularly over the last decade, the growing numbers of migrants from the Freely Associated States in Micronesia have become the target of racist discrimination. Intra-Oceanian conflict has been a big part of this story as Native Hawaiians have tended to see them not as family but rather as yet another wave of settlers, and in their case carrying all of the worst belittling stereotypes that Hau'ōia rejected. Indeed, Joseph Genz and Julianne Walsh organized a special session at the Kona meetings on 'Ethnic Tensions in Hawai'i' that was prompted by a recent high school fight that erupted between Hawaiians and Micronesians, located within walking distance from this year's ASAO meeting in Kailua' (Genz and Walsh 2014). Thus, the story of connection and recognition between Kahu Mikahala and the man who came up to her is particularly poignant and meaningful.
5. Tengan: I did not include this in my delivered speech, though it was originally going to be the central focus. However, comments from an anonymous reviewer and encouragement from Kahu Mikahala convinced me to augment this section.
6. Doing what any good Moana anthropologists would do, we sought to reweave the connections of tū (time) and va (space) (Māhina 2010) so relocated our party to the land of Hong Kong-style cuisine smells at Happy Days Chinese Seafood Restaurant at the intersection of Wai'aleale and 11th Ave. The food was excellent, but I probably ate too much. We made room for folks who we did not know were coming.
7. Another cause for hope: following the 2014 meetings, Sa'ili Lilomaiva-Doktor (Sāmoan) and Marama Muru-Lanning (Māori) were elected as new incoming board members, one of whom will serve as ASAO Chair in two years.

## REFERENCES

- BRODWIN, K., S. MOREN, and J. HUTCHINSON. 2011. Anthropology as white public space. *American Anthropologist* 113: 545–556.
- CLIFFORD, J. 2009. Hau'ōia's hope: Association for social anthropology in Oceania 2009 distinguished lecture. *Oceania: a Journal Devoted to the Study of the Native Peoples of Australia, New Guinea, and the Islands of the Pacific* 79: 238–249.
- DIÁZ, V. 2012. Sniffing Oceania's behind. *The Contemporary Pacific* 24: 324–344.
- GENZ, J. and J. WALSH. 2014. Ethnic tension in Hawai'i. *Association for Social Anthropology Newsletter (April)* 148: 20–21.
- HAU'ŌFA, E. 1993. Our sea of islands. In E. Waddell, V. Naidu, and E. Hau'ōia (eds) *A New Oceania. Rediscovering Our Sea of Islands*. Suva: School of Social and Economic Development, The University of the South Pacific, pp. 2–16.
2008. *We Are the Ocean: Selected Works*. Honolulu: University of Hawai'i Press.
- KAME'ELEIHIWA, L. 1992. *Native Land and Foreign Desires: Pehea Lā E Pono Ai?* Honolulu: Bishop Museum Press.
- KAWELU, K. 2013. Native Hawaiian perspectives on archaeology: Editor's comments. *The SAA Archaeological Record* 13(1): 30.
- KEKAHUNA, H.E.P. n.d. A brief testimonial for the correctness of the year 1736 as that of the birth of Kamehameha the conqueror vindicating kamakau, and other native experts. Unpublished manuscript. Folder 61, Box 4, Henry Enoke Palenapa Kekahuna Collection, M-445, State of Hawai'i Archives.
- 1953 (July 10). Sketch of Kāiākeakua now known as Kailua Bay. Bernice Pauahi Bishop Museum Image SP 201858. Map: 50-HA-D9; 11 MS Group 312. <http://50.62.139.14/Kekahuna/kekahuna.php?b=maps>. Accessed 5 September 2014.
- KEKAHUNA, H.E.P. and T. KEISEY. 1954. *Kamehameha in Kailua, Hilo Tribune Herald* (February 28–April 5).
- KENT, N. 1993. *Hawai'i: Islands under the Influence* (revised edition). Honolulu: University of Hawai'i Press.
- MAHINA, H.O. 2010. Ta, Va, and Moana: Temporality, spatiality, and indigeneity. In T.P.K. Tengan, T.O. Ka'ili and R.T. Fonoti (eds) *Genealogies: Articulating Indigenous Anthropology in/of Oceania. Pacific Studies 33(2/3)*: 168–202.
- MCDUGALL, B.N. 2014. Putting feathers on our words: Kaona as a decolonial aesthetic practice in Hawaiian Literature. *Decolonization: Indigeneity, Education and Society* 3(1): 1–22.
- PACIFICA NEWS SERVICE. n.d. Hawai'i hotel Attempts to oust spiritual leaders. <http://pacificanews-service.blogspot.com/search/label/AhuenaHeiau>. Accessed 5 September 2014.
- PUKUI, M.K. and S.H. ELBERT. 1986. *Hawaiian Dictionary* (revised and enlarged edition). Honolulu: University of Hawai'i Press.
- RECHTMAN, R.B. and H. POEPOE. 2008. *Cultural impact assessment for renovations to the King Kamehameha Kona Beach Hotel*. Prepared for Gregory Mooers, Mooers Enterprises, LLC. Appendix 2 of Final Environmental Assessment: Hotel Renovations, King Kamehameha Kona Beach Hotel. IWF KKH, LLC. Prepared by Geometric Associates LLC. Available from the Office of Environmental Quality Control at: [http://oeqc.doh.hawaii.gov/Shared%20Documents/EA\\_and\\_EIS\\_Online\\_Library/Hawaii/2008/2009.05.08-HA-FEA-King-Kamehameha-Hotel.pdf](http://oeqc.doh.hawaii.gov/Shared%20Documents/EA_and_EIS_Online_Library/Hawaii/2008/2009.05.08-HA-FEA-King-Kamehameha-Hotel.pdf). Accessed 5 September 2014.
- ROY, K.M. 2014a. Lands & seas of hope. Email message forwarded to T. Tengan (January 17).
- 2014b. Viewpoint: Ahu'ena Heiau. *Ke Oia: 'The Life'*. Hawai'i Island Edition (July/August): 62–64. [keolamagazine.com](http://keolamagazine.com)
- TENGAN, T.P.K. 2008. *Native Men Remade: Gender and Nation in Contemporary Hawai'i*. Durham and London: Duke University Press.
- TENGAN, T.P.K., T.O. KA'ILI, and R.T. FONOTI. 2010. Genealogies: Articulating indigenous anthropology in/of Oceania. In *Genealogies: Articulating Indigenous Anthropology in/of Oceania. Pacific Studies 33(2/3)*: 139–167.
- WEST, P. 2013. From the chair. *Association for Social Anthropology in Oceania Newsletter (April)* 145: 2–5.
- WHITE, G.M. and T.K. TENGAN. 2001. Disappearing worlds: Anthropology and cultural studies in Hawai'i and the Pacific. *The Contemporary Pacific* 13: 381–416.

**Kulana Huli Honua**  
*Foundation of the Search for Wisdom*

Kulana Huli Honua is a group that formed in June, 1999 and whose non-profit status as an organization was established with the State of Hawaii in March, 2000, becoming a 501-C3 organization in early 2001. Individuals initially involved with the 1975 restoration of Ahu'ena Heiau came together to live their culture, support the work of the Kahu & serve the community in connection with the care of Ahu'ena Heiau, Hawaiian Sacred Site and National Historic Landmark at Kamakahonu, Kona Hawaii.

This is a non-profit organization with an old mission that is two-fold. Kulana Huli Honua (KHH) shall:

- I. Guide and support the life and care of Ahu'ena Heiau and its surrounding environment at Kamakahonu, Hawaii through work with the adjacent landowner, government and non-government entities. KHH shall guide and support the life and care of other cultural treasures and advocate for sacred sites in Hawaii.
- II. Promote the practice, study, education and preservation of Hawaiian Culture through means including the establishment of Archive Libraries to contain the history and wisdom of Hawai'i's ancients for 'O'iwi in their homeland and for the communities of Hawaii. Promote the creation of Kahu in the communities.

The restoration of Ahu'ena Heiau is an isolated case of the restoration of celebrated and sacred places of Hawaii in the modern era. Not since Naluahine Ka'opua guided the work in the mid-1900's at Kaika'iakoala Heiau in Puapua'a II, North Kona has restoration to this extent been seen. Moreover, it is an example of how collaborative effort from the cultural, business, governmental and scientific communities may result in progress toward integrity of knowledge in the lands of Hawaii.

Kamakahonu is the first Capital of Hawaii as Kamehameha the Great established residency there in 1812 entertaining visitors and conducting affairs for a newly unified Kingdom. The restoration of Ahu'ena Heiau provides a strong reminder to future generations that such work is important. On a Hawai'i Island that bears evidence of imbalanced and detrimental development of lands over time, the example of this Heiau restoration and work toward its perpetual care takes on deeper meaning.

Ahu'ena Heiau is a site that is both on dry land and in the sea. The lands at Kamakahonu were adversely affected when a pier was erected in times when there was no advocacy for Hawaiian historic and sacred sites and work toward their restoration. Such work provides valued precedent toward making the case for future generations that alternatives exist for land use in Hawaii. Further, that *Ka 'Imi 'Olan'i'o* the search of truth in knowledge of the islands of Hawaii is of high importance and is a realistic expectation.

Kulana Huli Honua  
P O Box 596  
Kailua Kona, HI 96745-0596  
(808) 322-3281

**From:** Kawika McKeague  
**Sent:** Wednesday, August 7, 2024 6:23 PM  
**To:** 221053-01 KS Keauhau Entitlements  
**Subject:** FW: Comment Draft EIS Keauhau Bay 7 of 7 from Lamaku

**Categories:** Yellow Category



Kawika McKeague, AICP  
Principal

**From:** Lamakú <[REDACTED]>  
**Sent:** Wednesday, August 7, 2024 4:27 PM  
**To:** Kawika McKeague <[REDACTED]>  
[REDACTED] ft EIS Keauhau Bay

Aloha,

Please include the following testimony with the video I have just submitted for inclusion of my testimony. Mahalo.

1. Relating to the above - cited instance confirmed by video submitted by an 'O'iwi Leader of Cultural Religious Practices, Mr. Jim Medeiros, Sr. of Hōnaunau, I wish to include this content in with the content submitted relating to the NPS at Kaloko-Honokōhau. **A.** Both parks lie in the Kapu Kanahā. **B.** Both parks present the belief that the laws of the U.S. govern & prevail over the religious practices of 'O'iwi of Akua Manamanaloa of the Restored Kingdom of Hawai'i of Ali'i Nui Mō'i Edmund K. Pākī -Silva, II. Nothing could be further from the truth. The lands from Kaloko-Hōnaunau are **KAPU** as declared by Akua Manamanaloa. It is known there are numerous Heiau, sacred sites, burials of high importance, unique resonance and unique essence of quality of reverberating peace in the lands. Further, all wildlife over the many years through the present tell their stories by their lives as part of the Sacred Whole of each Ahupua'a. For example, the sacred practices taught to 'O'iwi by their royal parents are alive and well. The sacred life of the sea is especially important to 'O'iwi and many uphold spiritual practices taught by their elders in the sanctity, peace, and harmony of Akua

## manamanoaloa. Name each & every ahupua'a throughout Kapu Kanahā.

2. Relating to the NPS Kaloko-Honokohau advisory, here is an instance of an actual instance where Divine World engaged with us at Kaloko at the occasion of a landscape-clearing episode. Where the Divine World speaks to 'Ōiwi and all, here is a precedent. The event that happened on 3 November 2014 was the spiritual conveyance written in gold letters upon a PDF page. It was a great event that that happened and can happen again --- and again. It may happen at any time concerning any lands of Hawai'i & the Pacific especially within the Kapu Kanahā (the 40 miles of especially sacred lands) in Kaluaokalani. **Now that we are fully appreciative and aware of the great gifts of Spirit arriving from our Ancestors and from Akua, we know that here at Ahu'ena Heiau and throughout the entire 40-mile perimeter outlined by Akua, known as the Kapu Kanahā, we are to be spiritually alert and awake to God's messages for mankind.**



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## Diane Mistler

Please reject Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a serious negative impact in Keaouhou Bay and the surrounding community.

Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after. The fertilizers and pesticides alone will drain down into the ocean and have a serious impact on the fish and flora.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff."

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," shares that the golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are being held off from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keaouhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endanger these species.

This Bay is one of the treasures we still have and worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is. Once it is gone it is impossible to get it back!!!

## Diane Mistler, DDS

Please reject Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a serious negative impact in Keaouhou Bay and the surrounding community. Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after. The fertilizers and pesticides alone will drain down into the ocean and have a serious impact on the fish and flora. Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff." The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," shares that the golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are being held off from running into the Bay by the very trees you want to take down. Let's not forget the marine life that will be threatened by excess pollution and traffic. Keaouhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endanger these species. This Bay is one of the treasures we still have and worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is. Once it is gone it is impossible to get it back!!!

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**From:** keaouhoubay <keaouhoubay@ksbe.edu>  
**Sent:** Tuesday, August 6, 2024 9:07 AM  
**To:** Misty Mistler  
**Subject:** Re: [EXTERNAL] Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT!

**Categories:** Yellow Category

Aloha e Misty,

Thank you for your comments concerning the Keaouhou Bay Management Plan, Draft Environmental Impact Statement. Your comments have been received and administratively recorded.

Comments received during the 45-day public comment period will be reproduced in the Final Environmental Impact Statement, and substantive comments addressed.

Since you also provided a copy to the County of Hawai'i and our planning consultant, G70, we will not be forwarding them a duplicate copy.

We appreciate your involvement and contribution to the environmental review process. Your input is invaluable in helping us develop a management plan that reflects the needs and concerns of our community.

Thank you once again for your engagement and commitment to the future of Keaouhou Bay.

Mahalo,

The Keaouhou Bay Project Team

---

**From:** Misty Mistler <[REDACTED]>

**Sent:** Sunday, August 4, 2024 9:24 AM

**To:** KeaouhouBay@g70.design <KeaouhouBay@g70.design>; Alex.Roy@hawaiicounty.gov <Alex.Roy@hawaiicounty.gov>; Planning@hawaiicounty.gov <Planning@hawaiicounty.gov>; keaouhoubay <keaouhoubay@ksbe.edu>

**Subject:** [EXTERNAL] Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT!

**CAUTION: This email is from an outside sender. Do not click on links or open attachments unless you recognize the sender and know the content is safe.**

To whom it may concern,

Please reject Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keaouhou Bay and the surrounding community.

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after. The fertilizers and pesticides alone will drain down into the ocean and have a serious impact on the fish and flora.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff."

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endanger these species.

This Bay is one of the treasures we still have and worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is. Once it is gone it is impossible to get it back!!

Thank you for your consideration in this matter,  
Diane E. Mistler, DDS

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**From:** Misty Mistler <[REDACTED]>  
**Sent:** Sunday, August 4, 2024 9:25 AM  
**To:** 221053-01 KS Keauhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keauhoubay@ksbe.edu  
**Subject:** Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT!

**Categories:** Green Category

To whom it may concern,

Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keauhou Bay and the surrounding community.

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after. The fertilizers and pesticides alone will drain down into the ocean and have a serious impact on the fish and flora.

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Thank you for your consideration in this matter,  
Diane E. Mistler, DDS

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**From:** Robert Mollers <[REDACTED]>  
**Sent:** Tuesday, August 6, 2024 11:59 AM  
**To:** 221053-01 KS Keauhou Entitlements; Alex.Roy@hawaiicounty.gov;  
Planning@hawaiicounty.gov; Keauhoubay@ksbe.edu  
**Subject:** Help Keep Keauhou Bay Safe On Big Island

**Categories:** Yellow Category

To whom it may concern,

Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keauhou Bay.

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "*What is the biggest source of pollution in the ocean?*" by NOAA, National Oceanic and Atmospheric Administration, states, "*When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides.*" It also states, "*Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff.*"

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "*Putting the Earth in Play: Environmental Awareness and Sports,*" shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endangered these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,  
Robert Mollers

**From:** Alicia Morrier <[REDACTED]>  
**Sent:** Monday, August 5, 2024 10:24 PM  
**To:** 221053-01 KS Keauhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keauhoubay@ksbe.edu

**Categories:** Green Category

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keauhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keauhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is **scientifically proven** that developments pollute nearby waters both **during and after development**.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have **ALWAYS** polluted the water in **EVERY** coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keauhou Bay is their habitat and this development **WILL be CHANGING an Entire Ecosystem**.

#### **ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT**

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keauhou Bay.

The Green Sea Turtle swims in Keauhou Bay weekly and the monk seal has also been seen swimming and resting in Keauhou Bay. Both of these marine animals are on the endangered species list.

## **Endangered Species Act**

"Section 2. Findings, Purposes, and Policy

- (4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—
- (b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

## **FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED**

The green sea turtle is federally protected and can be seen in Keauhou Bay weekly.

The following article that states: "**POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES**"

### **Why does Hawaii have a runoff problem?**

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken

from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

**Allowing this development WILL POLLUTE Keauhou Bay.** The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keauhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen **because developments have been shown to ALWAYS pollute the water is that is nearby.**

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawaii are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

## **THE ENDANGERED MONK SEAL WILL BE AFFECTED**

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keauhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

**Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keauhou Bay will likely be changed forever.**

This information is from a NOAA Scientist: "**Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'!**" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought;" <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

**Keauhou Bay is the monk seals and the green sea turtle's habitat.** Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. **By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.**

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to **protect the land around Keauhou Bay** from developments that destroy the habitat of these endangered species with pollution and runoff.

**Does this EIS have any reports on the endangered species that frequent Keauhou Bay? This is their habitat and it needs to be "conserved".**

Under the **Conservation Program** there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project.

## **GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS**

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where **the Hawai'i government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keauhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.**

**These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.**

Under Section 2 (b) of the Endangered Species Act - **Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species.** It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

#### **ALGAE BLOOMS KILL CORAL AND MARINE LIFE**

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

**Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.**

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course development. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

**Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?**

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The

vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution.. "<https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

if you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAYS ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

**Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?**

This needs to be fully assessed because **you will be changing an entire ecosystem** to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

**FURTHERMORE:** "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

#### **ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN**

**Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?**

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests

with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

### **The article below is from NOAA regarding motor vehicle engines and pollution to the sea.**

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

### **Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects**

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2022/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%20Nearly%2085%20percent,pipeli ne%20spills%2C%20says%20a%20new>

### **The Impact Of Stormwater – Car Emissions**

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that

can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershedphd.org.au/blog/the-impact-of-stormwater-car-emissions/>

### **NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE**

#### **Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?**

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

### **How Does Noise Pollution Harm Marine Species?**

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation->



### **It's Been Proven Developments Severely Pollute Nearby Waters**

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide..."

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban runoff). " <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20Bleaching%20is%20Occurring%20more,hard%20cattatrophic%20impacts%20state%2Dwide>.

**This article is by the Coral Reef Alliance here in Hawaii.** "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawai%CA%BBi%20reefs%20face%20major%20global,into%20Hawai%CA%BBi%20waterways%20every%20day>.

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "**Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019...**

**We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental**

**effects of local anthropogenic stressors, such as tourism and urban runoff, may be exacerbated under high thermal stress.** In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

**"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.**

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

**Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species."** <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species>.

Article by Environmental Evidence, "**Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide.**" <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide>.

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats

to reefs is pollution. **Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.**

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humantthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organic%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humantthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organic%20that%20can%20smother%20corals.)

Another article by NOAA, "**Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)**

**Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and**

**survival"** [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humantthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humantthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

**It's Been Proven Resort Developments KILL Marine Life**

This article by MarinBIO states, "**Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change.** Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon. The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. **This occurred in a relatively short time considering that the experiment lasted less than three weeks.** The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net

decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

**The ecosystem is fragile and interconnected as is stated in this article:**

"Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO.

<https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "**Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage.** Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

**HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH**

### **Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?**

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: **The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life.**" <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

### **Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.**

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou

Bay. **Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it.** Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

### **It's Been Proven an Increase in Human Population Destroys Coral Reefs**

if a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. **"Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs.** Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, **"This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found.** The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there>

%20are%2C%20the%20research%20found&text=The%20millions%20of%20tourists%20who%20world%2C%20a%20new%20study%20said.

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

**"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction.** Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation>.

Another article by Nature Sustainability, "**Coral reefs and coastal tourism in Hawaii** Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, **coral reefs both attract and suffer from coastal tourism.** Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNha3hJjAnWAq453tRgN0jAjWel9jnR3ZvT0PjYGzA51c\\_H001zcHNIP3ASnhcgKRY6\\_vKLPw49dbrmBYoX5g3YIMgQjGBZsapidGUH701SLbu9x5P3xED4KxI4TosJlvqQ1a7ZZRt3rUbraxpodId2AoNlSmWSuxB7JjEDdpJ8OGJpx71TJWdCRxvFKJZYeNdcJj3Sw\\_dnaUg5tZlhcjPBDImmaH15yqT5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNha3hJjAnWAq453tRgN0jAjWel9jnR3ZvT0PjYGzA51c_H001zcHNIP3ASnhcgKRY6_vKLPw49dbrmBYoX5g3YIMgQjGBZsapidGUH701SLbu9x5P3xED4KxI4TosJlvqQ1a7ZZRt3rUbraxpodId2AoNlSmWSuxB7JjEDdpJ8OGJpx71TJWdCRxvFKJZYeNdcJj3Sw_dnaUg5tZlhcjPBDImmaH15yqT5Q%3D&tracking_referrer=abcnews.go.com)

## **INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS**

### **Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?**

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

### **Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?**

"Hilo waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. **Worldwide, hotels produce almost 300,000 tonnes of waste each year.**" <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keauhou Bay. On Hawaii Island, we are already struggling to meet the increasing need for resources and infrastructure.

### **Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawaii'i landfill**

September 17, 2023

The West Hawaii'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawaii'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

### **A County commission drafts ordinance aiming to ban recyclables at West Hawaii'i landfill**

By Megan Moseley September 6, 2023

Hawaii County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawaii County Director of Environmental Management, told commissioners the West Hawaii Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

### **Time's Up For Landfills**

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawaii government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural land/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

### **Drought Conditions On Hawaii Island Prompt Water Supply Message**

by Big Island Video News  
on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawaii island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawaii island is under "Moderate Drought" conditions, according to the latest information from the [U.S. Drought Monitor](#). There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawaii County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

### **From a Water Supply news release:**

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawaii%CA%BB-i-island-prompt-water-supply-message/>

U.S.

## Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to significant droughts, and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the world's largest surfing wave pool opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe."

**"We are in a water crisis, that has to be made very clear,"** Wayne Tanaka, director of Sierra Club of Hawaii, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

### UPDATE: HELCO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity us is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

### Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

### Big power supply problems continue to plague Hawaii Island

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

**The company explained that it faces an "extremely tight" supply of power at peak use periods,** especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

#### **Hawaii island customers urged to reduce electricity use through April**

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

**-If there is not enough electricity to meet demand,** Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

#### **FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES**

#### **A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?**

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawaii News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "**Hawaii Island has most traffic fatalities in state.**" This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

**"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here,"** he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

**The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.**

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: **All of these roads only have two lanes!**

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=-FQsSnPDjI8>

**Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.**

**Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:**

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawai'i Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

**"That's just Big Island traffic,"** is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

**MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC AND WASTEWATER:**

**1) Hawaii Deals with Burgeoning Waste Management Problem**

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

**2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawaii's Sanitary Landfill reaching capacity.**

The West Hawaii's Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

**3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste** Hawaii's Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

**4) "What happens to Hawaii Island's trash and recyclables?"** BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent

regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community

support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

**5) "The overwhelming plastic waste Hawaii visitors leave behind** By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

**6) "A County commission drafts ordinance aiming to ban recyclables at West Hawaii's landfill** By Megan Moseley September 6, 2023 · 1:00 AM HST \* Updated September 6, 2023 · 2:02 PM

Hawaii's County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

**7) "Hawaii's County issues mandatory 25% water restriction for North Kona** August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

**8) "Hawaii's Water Supply Closely Monitored As Severe Drought Continues** by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/>

**9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant** Kealahehe sewage plant discharges more than 1 million

gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

**10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii" Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST**

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

**11) "Kona coast faces stark wastewater tradeoffs, Current situation**

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

**12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST**

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

**13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST**  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

**14) HELCO issues rolling power outages around Big Island** by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

**15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii" Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST**

Water departments on Oahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawika Uyehara, deputy director of Hawaii County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

**16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) News Hawaii'i County issues mandatory 25% water restriction for North Kona  
August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

**18) Hawaii'i Water Supply Closely Monitored As Severe Drought Continues**

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawaii, the Hawaii'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca-bbi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

**19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."**

[https://www.reddit.com/r/Bigisland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/Bigisland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/?rdt=52660)

**20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators"**

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

## **HISTORICAL AND CULTURAL SIGNIFICANCE:**

### **The Law of the Splintered Paddle**

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānawai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially Kupuna and Keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawaii. After being added back in 1978, **the law is part of Hawaii's State Constitution today.**

It is symbolic of servant leadership, reinforcing the importance of:

-Caring for and serving one's people

-Knowing and doing what is pono (right)

-Standing for the principle that leadership privilege is earned

-Taking kuleana (responsibility) for those we serve

-Doing so with compassion, love, and respect

**"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."**

**The Law of the Splintered Paddle is also on Kamehameha Schools website.** The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

**Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.**

## IN CONCLUSION

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keaouhou Bay and "The **Endangered Species Act of 1973 (ESA)** or "The Act"; 16 U.S.C. § 1531 et seq.) **is the primary law in the United States for protecting and conserving imperiled species.** Designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President Richard Nixon on December 28, 1973. The **Supreme Court of the United States** described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation".<sup>[1]</sup>" [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keaouhou Bay on the other. This land **MUST** be conserved in order to keep Keaouhou Bay safe for all the marine life to be able to live there for years to come.

In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved. These issues **MUST** be solved before considering another resort development on Big Island.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keaouhou Bay, the birthplace of King Kamehameha III. Keaouhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is **NOT** suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen.

Please save Keaouhou Bay's marine life and help the island's resources by saying **NO** to a Bungalow Resort built by Kamehameha Schools.

Please reject this EIS because Kamehameha Schools has **NOT** **ACKNOWLEDGED** OR **ASKED** thousands of Hawaiians, or Hawaiian Descendants from Keaouhou Bay how they feel about developing this land, Keaouhou Bay.

They have asked **ONLY** a few families on an island that has thousands of Hawaiian people and here is video testimony from Kupuna Kumu Lily Kong who is a Keaouhou Bay descendant and her and her mother **OPPOSE DEVELOPMENT!** <https://vimeo.com/994680462>

Kupuna Kumu Lily Kong who was born in Keaouhou Bay and she states that she is against development. She also states that her mother was against development as well. Please listen to her words in her testimonial video about Keaouhou Bay on this link and know that this proves that descendant directly from Keaouhou Bay **OPPOSE THIS DEVELOPMENT** <https://vimeo.com/994680462> and it is **CULTURAL LAW THEY MUST BE HEARD AND ACKNOWLEDGED!**

These laws were created, "After these legal victories, the Kohaiki 'Ohana worked to create a new law in the state of Hawaii to require Cultural Impact Statements along with Environmental Impact Statements for all future large-scale development. Act 50, the Cultural Impact Statement Law was adopted in 2000." <https://kohanaikiohana.org/legal-victories>

Kupuna Kumu Lily Kong also states that there are burial grounds on the land that Kamehameha Schools wants to clear and it is told that Kamehameha Schools has bulldozed sacred land in the past and Keaouhou Bay's burial grounds MUST BE RESPECTED AND NOT DISTURBED!

Hawaiians locals have said that there were bones in the small cave that is at the base of Keaouhou Bay. These burials need to take priority over a Bungalow Resort Development.

There are over 6,219 signatures as of Aug. 5th (these signatures grow daily) and these signatures are Hawaiians, locals and tourist and some of these Hawaiians have left comments on why they are opposing this development.

**ALL OF THESE PEOPLE HAVE A RIGHT TO BE ACKNOWLEDGED AND THEIR VOICES HAVE VALUE TO BE HEARD, THESE PEOPLE MATTER AND IT IS CULTURAL LAW THEY MUST BE ACKNOWLEDGED!**

Here is the petition link with thousands of Hawaiian signatures and comments opposing Kamehameha Schools Bungalow Resort Development. Please read these signatures and comments! [https://www.change.org/p/save-keaouhou-bay-from-becoming-a-big-crowded-resort?utm\\_source=share\\_petition&utm\\_medium=custom\\_url&recruited\\_by\\_id=92a53560-1e91-11e5-b4ef-b94e90cedbdd](https://www.change.org/p/save-keaouhou-bay-from-becoming-a-big-crowded-resort?utm_source=share_petition&utm_medium=custom_url&recruited_by_id=92a53560-1e91-11e5-b4ef-b94e90cedbdd)

Please reject this EIS because under Princess Bernice Pauahi Bishop's Will it states Kamehameha Schools are her trustees and they have a **"fiduciary duty" to do what is best for THEIR BENEFICIARIES (the Hawaiian people's) and a Bungalow Resort is BEST FOR TOURISTS NOT THE HAWAIIAN PEOPLE BECAUSE THOUSANDS OF HAWAIIAN PEOPLE SINGED THE ABOVE PETITION OPPOSING KAMEAHMEHA SCHOOLS BUNGALOW RESORT.**

Please reject this EIS because the **Big Island DOES NOT HAVE THE RESOURCES TO PROVIDE FOR ANOTHER BIG RESORT ON ISLAND** and there are 445 signatures with many comments that agree with this fact because of the factual reported articles in the **Help Prioritize Big Island Developments to Keep Island's Resources Safe for ALL petition. Please read this petition, all the signatures and comments** <https://www.change.org/p/help-prioritize-big-island-developments-to-keep-island-s-resources-safe-for-all>

Mahalo,

Alicia Morrier





The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

#### THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keaouhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keaouhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keaouhou Bay will likely be changed forever.

This information is from a NOAA Scientist; "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keaouhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keaouhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keaouhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keaouhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keaouhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keaouhou Bay and the surrounding area during the building phase of this enormous project.

#### GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshingolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keaouhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "

Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,dishcharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,dishcharge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keaouhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keaouhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where the Hawai'i government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

#### ALGAE BLOOMS KILL CORAL AND MARINE LIFE

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution.

" <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAHOUBAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef-pavement?>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

FURTHERMORE: "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

#### ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20says%20a%20new>

#### The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershed.org.au/blog/the-impact-of-stormwater-car-emissions/>

#### NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keaou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

#### How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the

marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dhr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

#### What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

#### LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keaou Bay. If it's being drastically hurt by runoff water from developments, Keaou Bay waters won't stand a chance if development above the bay is allowed. Keaou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keaou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to

100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

#### MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawai'i. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts statewide..."

This was the third major bleaching episode in Hawai'i over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off). " <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,had%20catastrophic%20impacts%20statewide.>

This article is by the Coral Reef Alliance here in Hawai'i. "An ecosystem under threat Hawai'i's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawa%CA%BBj%20reefs%20face%20major-%20global,into%20Hawai%CA%BBj%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawai'i." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawai'i has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris."

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)"

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-*a* concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by

MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20als>  
<https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20als>  
<https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20als>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3\\_6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3_6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

#### HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution."

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs>.

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20study%20said.>

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human

perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaJhJAnWAq453trGn0JAJweI9mR3ZofTv0PyGzA5Ic.H001zcHNIP3ASnhcgkRy6.yKLPw49dbmBYoXSg3YlMgQIGBZsapdGUH701SLbu9xSPr3xED4Kk4fT0sJlvgQ1a72ZR3rUbraxpdId2AoNISMWsuXB7jJEDdpj8Gjpx71TjWdCfXvFkIIZYeNdcJf3Sw\\_dnaUg5ZlhcjPBDImmahI45yqT5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaJhJAnWAq453trGn0JAJweI9mR3ZofTv0PyGzA5Ic.H001zcHNIP3ASnhcgkRy6.yKLPw49dbmBYoXSg3YlMgQIGBZsapdGUH701SLbu9xSPr3xED4Kk4fT0sJlvgQ1a72ZR3rUbraxpdId2AoNISMWsuXB7jJEDdpj8Gjpx71TjWdCfXvFkIIZYeNdcJf3Sw_dnaUg5ZlhcjPBDImmahI45yqT5Q%3D&tracking_referrer=abcnews.go.com)

INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste each year." <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keauhou Bay. On Hawai'i Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill

September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill

By Megan Moseley September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

15

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

Drought Conditions On Hawai'i Island Prompt Water Supply Message

by Big Island Video News  
on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information from the U.S. Drought Monitor. There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka ū.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawai%CA%BBi-island-prompt-water-supply-message/>

U.S.

Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to significant droughts, and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly

16

limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the world's largest surfing wave pool opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. " ... We are on the verge of a greater catastrophe."

"We are in a water crisis, that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawai'i, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

UPDATE: HELCO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity use is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

Big power supply problems continue to plague Hawaii Island

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island  
<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

#### FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES

A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?

A development with 150+ rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawai'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state. This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: All of these roads only have two lanes!

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FQ5smPDj8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) "The overwhelming plastic waste Hawaii visitors leave behind By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A County commission drafts ordinance aiming to ban recyclables at West Hawaii landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawaii's County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawaii's Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-CA-BBI-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

**MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC and WASTEWATER:**

1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawaii's Sanitary Landfill reaching capacity.

The West Hawaii's Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawaii's Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches near-shore waters Hawai'i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST  
There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawai'i Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs; Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawai'i State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) HELCO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawai'i's water supply Hawai'i Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawai'i Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawai'i's power system from its water system, said Kawika Uyebara, deputy director of Hawai'i County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) News Hawai'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawai'i Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BB-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiielectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."  
[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/?rdt=52660)

20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators March 25, 2024 · 11:49 AM HST  
According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues. The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

#### HISTORICAL AND CULTURAL SIGNIFICANCE:

The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, the law is part of Hawai'i's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)

- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

The Law of the Splintered Paddle is also on Kamehameha Schools website. The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.

#### IN CONCLUSION

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keauhou Bay and "The Endangered Species Act of 1973 (ESA or "The Act"; 16 U.S.C. § 1531 et seq) is the primary law in the United States for protecting and conserving imperiled species. Designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President Richard Nixon on December 28, 1973. The Supreme Court of the United States described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation". [1]" [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other. This land MUST be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come.

In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved. These issues MUST be solved before considering another resort development on Big Island.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environmental from further damage. The location is NOT suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen.

Please save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.

Mahalo,

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**From:** keauhoubay <keauhoubay@ksbe.edu>  
**Sent:** Tuesday, August 6, 2024 11:14 AM  
**To:** Celia Murry  
**Subject:** Re: [EXTERNAL] Kamehameha Schools EIS Draft for Keauhou Bay Will Get The State SUED and have NEGATIVE IMPACT (obviously)

**Categories:** Yellow Category

Aloha e Celia,

Thank you for your comments concerning the Keauhou Bay Management Plan, Draft Environmental Impact Statement. Your comments have been received and administratively recorded.

Comments received during the 45-day public comment period will be reproduced in the Final Environmental Impact Statement, and substantive comments addressed.

Since you also provided a copy to the County of Hawaii'i and our planning consultant, G70, we will not be forwarding them a duplicate copy.

We appreciate your involvement and contribution to the environmental review process. Your input is invaluable in helping us develop a management plan that reflects the needs and concerns of our community.

Thank you once again for your engagement and commitment to the future of Keauhou Bay.

Mahalo,

The Keauhou Bay Project Team

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**From:** Celia Murry <[REDACTED]>  
**Sent:** Wednesday, July 24, 2024 11:35 AM  
**To:** Planning@hawaiicounty.gov <Planning@hawaiicounty.gov>; keauhoubay@g70.design <keauhoubay@g70.design>; Alex.Roy@hawaiicounty.gov <Alex.Roy@hawaiicounty.gov>; keauhoubay <keauhoubay@ksbe.edu>  
**Subject:** [EXTERNAL] Kamehameha Schools EIS Draft for Keauhou Bay Will Get The State SUED and have NEGATIVE IMPACT (obviously)

**CAUTION: This email is from an outside sender. Do not click on links or open attachments unless you recognize the sender and know the content is safe.**

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keauhou Bay to become a Bungalow Resort. The EIS is not well-informed, ethical, or legal. Industries based on Hawaii (tourism, hospitality) should be prioritizing sustainability. You can't tour something that isn't there. Hawaii will not even be Hawaii anymore. It's disappointing that a school, who is supposed to perpetuate Hawaiian culture, is the one

putting it in danger. This doesn't even make common sense, and it goes against many laws. The state has been sued before when they accepted a EIS that would have gotten me a failing grade in my high school environmental science class. Stop. Selling. Out. Soon there won't be anything to sell. <https://biologicaldiversity.org/w/news/press-releases/lawsuit-targets-hawaii-land-boards-failure-to-protect-reefs-fish-aquarium-pet-trade-2021-07-13/>

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keaouhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.

#### ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) The United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

#### FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED

The green sea turtle is federally protected and can be seen in Keaouhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES" Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According

to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Allowing this development WILL POLLUTE Keaouhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keaouhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawaii are protected by the Endangered Species Act (ESA) and additionally protected by Hawaii's Revised Statutes Chapter 195D (HRS) and Hawaii's Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

#### THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keaouhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keaouhou Bay.

This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keaouhou Bay will likely be changed forever.

This information is from a NOAA Scientist; "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawaii's Revised Statutes (HRS) Chapter 195D and Hawaii's Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keaouhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keaouhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973. The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keaouhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keaouhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keaouhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keaouhou Bay and the surrounding area during the building phase of this enormous project.

#### GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>  
These pesticides will be in the pollution runoff that will enter Keaouhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "  
Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keaouhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keaouhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where the Hawaii government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keaouhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keaouhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keaouhou Bay.

#### ALGAE BLOOMS KILL CORAL AND MARINE LIFE

The trees that are slated to be cleared for the development further protect Keaouhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer. When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow. One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course development. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution..

" <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/> If you allow a Bungalow Development in Keaouhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAOUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keaouhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

FURTHERMORE: "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

#### ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keaouhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keaouhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars

(likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife

habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs,

Fates, and Effects

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20oases%20a%20new>

The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershedrds.org.au/blog/the-impact-of-stormwater-car-emissions/>

NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation

Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often

overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

LEARN FROM OTHERS:

RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams....Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban

and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

#### MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments. Please read the Scientific articles below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawai'i. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts statewide..."

This was the third major bleaching episode in Hawai'i over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban runoff)." <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,had%20catastrophic%20impacts%20statewide.>

This article is by the Coral Reef Alliance here in Hawai'i. "An ecosystem under threat Hawai'i's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean.

Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawai%20reefs%20face%20major%20global,into%20Hawai%20CA%20BBi%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such

as tourism and urban runoff, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of Hawai'i." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawai'i has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below. "SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand."

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%20based%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments,

nutrients, chemicals, insecticides, oil and debris. When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.) Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by

MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12\\_3\\_6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12_3_6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

**HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH**

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally,

management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information

PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites->

<https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20stud>

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328H?text=Aquacultur> e%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaJhJAnWAq453tRgN0jAJWeI9jnR3z0TvoPyGzA5lc\\_H001zcHNIP3ASnhcgKRy6\\_vkLPw49dbmBYoX5g3Y1MgQIGBZsapdGUH1701SLbu9x5P3xED4KxI4T0slvgQ1a7Z2Rk3Ubraxpod42AoNISMWSuxB7JfEDdpJ8OGjpx71JW6CfXvKJIZYeNdcIj3Sw\\_dnalug5IzhcjPBDlimmaH15yqT5Q%3d&tracking\\_referrer=abcnews-go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaJhJAnWAq453tRgN0jAJWeI9jnR3z0TvoPyGzA5lc_H001zcHNIP3ASnhcgKRy6_vkLPw49dbmBYoX5g3Y1MgQIGBZsapdGUH1701SLbu9x5P3xED4KxI4T0slvgQ1a7Z2Rk3Ubraxpod42AoNISMWSuxB7JfEDdpJ8OGjpx71JW6CfXvKJIZYeNdcIj3Sw_dnalug5IzhcjPBDlimmaH15yqT5Q%3d&tracking_referrer=abcnews-go.com)

#### INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?  
There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste each year." <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keahou Bay. On Hawaii's Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawaii's landfill

September 17, 2023

The West Hawaii's Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawaii's landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

A County commission drafts ordinance aiming to ban recyclables at West Hawaii's landfill

By Megan Moseley September 6, 2023

Hawaii's County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawaii's County Director of Environmental Management, told commissioners the West Hawaii's Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

#### Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawaii's government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

Drought Conditions On Hawaii's Island Prompt Water Supply Message

by Big Island Video News

on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawaii's island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawaii island is under "Moderate Drought" conditions, according to the latest information from the U.S. Drought Monitor. There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Kāʻū.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawaii County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawaii%CA%BBi-island-prompt-water-supply-message/>

Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to significant droughts, and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the world's largest surfing wave pool opened up on the island — filled with freshwater. "They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe."

"We are in a water crisis, that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawaii, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

UPDATE: HELCO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity use is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumsocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

Big power supply problems continue to plague Hawaii Island

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumsocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES

A Resort Development Will Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawaii News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state. This time last year Hawaii island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/77-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: All of these roads only have two lanes.

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FQSnPDj8> Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path drivers, <http://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC AND WASTEWATER:

1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawaii's Sanitary Landfill reaching capacity.

The West Hawaii's Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste

Hawaii Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill  
 The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) "The overwhelming plastic waste Hawaii visitors leave behind  
 By Natasha Bourlin Aug 24, 2023  
 Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A County commission drafts ordinance aiming to ban recyclables at West Hawaii's landfill By Megan Mosley September 6, 2023 · 1:00 AM HST  
 \* Updated September 6, 2023 · 2:02 PM  
 Hawaii County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST  
 A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawaii Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY  
 HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe  
 Paula Dobbyn / February 6, 2024  
 Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters  
 Hawaii Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST  
 There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs, Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST  
 An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/helco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
 \* Updated February 14, 2024 · 4:21 PM  
 The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) HELCO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST  
 Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/helco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST  
 Water departments on O'ahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month.  
 But what does the power grid have to do with the water supply?  
 It is impossible to separate Hawaii's power system from its water system, said Kawika Uyebara, deputy director of Hawaii County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues  
 By Li Cohen  
 Updated on: April 11, 2024 / 8:23 AM EDT / CBS News  
 In Hawaii, one of the most important sayings is ola i ka wai, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."  
<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) News Hawaii County issues mandatory 25% water restriction for North Kona  
 August 7, 2023 · 5:21 PM HS  
 A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend.  
<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawaii Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm  
(BVFN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.  
<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai%CA%BBi-under-severe-drought/>  
This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>  
Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.  
19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."  
[https://www.reddit.com/r/Bigisland/comments/1bnua3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_la](https://www.reddit.com/r/Bigisland/comments/1bnua3/hawaiian_electric_is_reporting_that_several_la)  
[rge/?rdt=52660](https://www.reddit.com/r/Bigisland/comments/1bnua3/hawaiian_electric_is_reporting_that_several_la)  
20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators  
March 25, 2024 · 11:49 AM HST  
According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues. The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."  
<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>  
All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

#### HISTORICAL AND CULTURAL SIGNIFICANCE:

The Law of the Splintered Paddle  
Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.  
After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.  
The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, the law is part of Hawai'i's State Constitution today. It is symbolic of servant leadership, reinforcing the importance of:  
-Caring for and serving one's people  
-Knowing and doing what is pono (right)  
-Standing for the principle that leadership privilege is earned  
-Taking kuleana (responsibility) for those we serve

-Doing so with compassion, love, and respect  
"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."  
The Law of the Splintered Paddle is also on Kamehameha Schools website. The historical value of this law should be enough to help make  
Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>  
Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.

#### IN CONCLUSION

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keaouhou Bay and "The Endangered Species Act of 1973 (ESA or "The Act"; 16 U.S.C. § 1531 et seq.) is the primary law in the United States for protecting and conserving imperiled species. Designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President Richard Nixon on December 28, 1973. The Supreme Court of the United States described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation". [1]" [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)  
This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keaouhou Bay on the other. This land MUST be conserved in order to keep Keaouhou Bay safe for all the marine life to be able to live there for years to come.  
In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved. These issues MUST be solved before considering another resort development on Big Island.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keaouhou Bay, the birthplace of King Kamehameha III. Keaouhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is NOT suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen.

Please save Keaouhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.

Mahalo,

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## Charles Nahale

Aloha,  
I have reviewed the Keaouhou Bay Management Plan and want to provide my input and support in favor of it moving forward.  
I am a resident and descendant of the Nahale Ohana, who's roots emanate from Kahaluu N. Kona. I have seen the pristine beaches and ocean accessibility disappear over my lifetime, due to commercial, luxury residential and resort development. The significance and history of Kahaluu, Keaouhou and surrounding lands have been ignored, destroyed and pilfered as a result of lack of respect and greed of quick development and profitable exit. The once abundant ocean resources and access, which afforded a subsistence lifestyle for our Kamaaina is no longer a viable means to support a growing family. We must look at alternatives ways to maintain and support our families, We still have a responsibility to malama and restore our heritage, culture, history, and access of this Aina, in perpetuity.  
The Keaouhou Bay Management Plan addresses these issues regarding restoring access, creating public access and facility use, consolidating commercial facilities, restoring significant historical and critical habitat, providing education and collaborative development and stewardship. This is an opportunity for our community to see a development that is perpetuating the historical preservation of Keaouhou bay, its surrounding lands, its culture and inclusion of our Opio's.  
I am in support of this project  
Mahalo nui  
Charles Nahale

**From:** Nakamura, Darlene K <[REDACTED]>  
**Sent:** Thursday, August 8, 2024 10:52 AM  
**To:** 221053-01 KS Keaouhou Entitlements  
**Subject:** Request for Comments - DEIS re Keaouhou Bay Management Plan - Island of Hawaii

**Attachments:**  
Keaouhou Bay Management Plan.signed.pdf; Keaouhou Bay Management Plan.DOBOR Comments.pdf; Keaouhou Bay Management Plan.ENGRCOMMENTS.pdf; Keaouhou Bay Management Plan.CWRM Comments.pdf; Keaouhou Bay Management Plan.OCCLCOMMENTS.pdf; Keaouhou Bay Management Plan.HDLO Comments.pdf

**Categories:**  
Green Category, Red Category

Aloha Kawika,

Attached are comments from the Hawaii Department of Land and Natural Resources ("DLNR") to the above-entitled subject project.

Please note that future requests for the DLNR's review and comments may be emailed to both of the following email addresses:

[dlnr@hawaii.gov](mailto:dlnr@hawaii.gov) and [dlnr.land@hawaii.gov](mailto:dlnr.land@hawaii.gov)

Mahalo,  
Darlene

## Non Mon

I would like to ask you not to proceed with developing the Keauhou Bay. The bay is not only sacred but it is cherished by many as it is. By building another cookie cutter development that follow formula, you are escalating the tension with the peaceful community and further isolating the local people who respect the bay.  
Thank you for your attention

## Marcy O'Malley

Stop the over building of that beautiful sacred spot. Hotel units are definitely NOT needed at all there! Improve the bathroom's and keep the undeveloped area undeveloped

Please read the scientific proof in this letter and REJECT Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT in Keauhou Bay as stated in all the different researched articles below.

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Shoals to develop their bungalow resort project, because it is scientifically proven that developments pollute nearby waters constantly during development and after.

Please read these Scientific articles written by NOAA, National Oceanic and Atmospheric Administration and many other professional organizations, that have studied and proved that developments has ALWAYS polluted the water in every near coastal developed area.

**First, does this EIS have any kind of reports and studis on how the endangered species and marine life will handle the extra pollution due to development and golf course runoff because Keauhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.**

**In the Endangered Species Act of 1973 Under Section 2 (b), "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keauhou Bay.**

The Green Sea Turtle swims in Keauhou Bay weekly and the monk seal has also been seen swimming and resting in Keauhou Bay. Both of these marine animals are on the endangered species list.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the [Endangered Species Act \(ESA\)](#), and additionally protected by [Hawaii Revised Statutes Chapter 195D \(HRS\)](#) and [Hawaii Administrative Rules \(HAR\) 13-124](#)." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

"Hawaiian monk seals are protected federally by the ESA and the [Marine Mammal Protection Act \(MMPA\)](#), as well as locally by Hawai'i Revised Statutes (HRS) [Chapter 195D](#) and Hawai'i Administrative Rules (HAR) [13-124](#)." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

[ENDANGERED SPECIES CONSERVATION](#)

Endangered Species Act

**"Section 2. Findings, Purposes, and Policy**

**(4) the United States has pledged itself as a sovereign state in the international community to conserve** to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

**From:** keauhoubay <keauhoubay@ksbe.edu>  
**Sent:** Tuesday, July 30, 2024 4:34 PM  
**To:** Mayari Sherina Ong  
**Cc:** 221053-01 KS Keauhou Entitlements  
**Subject:** RE: [EXTERNAL] Zendo Kern Please OPPOSE Keauhou Bay Bungalow Resort because it WILL CAUSE SERIOUS NEGATIVE IMPACT!

**Categories:** Yellow Category

Aloha -

Thank you for your additional comments concerning the Keauhou Bay Management Plan, Draft Environmental Impact Statement. Your comments have been received and administratively recorded.

Comments received during the 45-day public comment period will be reproduced in the Final Environmental Impact Statement, and substantive comments addressed.

Copied here is our planning consultant, G70, who was not copied on this second email.

We appreciate your involvement and contribution to the environmental review process. Your input is invaluable in helping us develop a management plan that reflects the needs and concerns of our community.

Thank you once again for your engagement and commitment to the future of Keauhou Bay.

Mahalo,

The Keauhou Bay Project Team

**From:** Mayari Sherina Ong <[REDACTED]>  
**Sent:** Friday, July 19, 2024 9:48 AM  
**To:** keauhoubay <keauhoubay@ksbe.edu>; planning@hawaiicounty.gov; Alex.Roy@hawaiicounty.gov;

**Subject:** [EXTERNAL] Zendo Kern Please OPPOSE Keauhou Bay Bungalow Resort because it WILL CAUSE SERIOUS NEGATIVE IMPACT!

**CAUTION: This email is from an outside sender. Do not click on links or open attachments unless you recognize the sender and know the content is safe.**

To whom it may concern,

(b) PURPOSES.—**The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved**, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section." This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-act>

Keauhou Bay IS the monk seals and the green sea turtle's habitat and to allow a bungalow resort to be developed in Keauhou Bay, that is these endangered species habitat, is to threaten these endangered species habit with golf course runoff pollution, as well as development pollution and hence, threaten their habitat, hence their lives, and goes completely against the Endangered Species Act of 1973.

The words in the Endangered Species Act states, "to conserve" and conserving the endangered species that enter into Keauhou Bay would be to NOT DEVELOP A BUNGALOW RESORT because this would cause serious pollution runoff that would pollute the bay and endanger these already endangered species, the green sea turtle and the monk seal.

**Does this EIS have any reports on the endangered species that frequent Keauhou Bay because this is their habitat.**

**Under the Conservation Program there should be research done on endangered species and their associated ecosystems, which is Keauhou Bay. Because this bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.**

**"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems."** [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

**Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species."** [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please see that developing Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would happen a lot more often due to taking out the natural pollution filter, that is the trees and the land that is there now.

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to

developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely because of the bungalow resort development's pavement. As of right now the trees and land that this development wants to clear and develop into a bungalow resort is a Natural Pollution Filter.

Please read from **Wikipedia.**"

**Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean.** Other than catchbasins, **typically there are no treatment facilities in the piping system.**" [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20dry%20wells)

It's the pavement that this development wants to put in that will cause a lot of pollution to runoff into Keauhou Bay because this top land that is directly below the golf course (that they want to clear) soaks in the golf course pesticides, fertilizer, weed killer... and is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pollution.

Please see this site at <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> because on page 2 it states **from the Hawaii government that Natural Ground Cover has 10% runoff, where has development has 55% runoff.**

**These trees and land** are saving monk seals and green sea turtles habitat from the golf course pollution and this land **MUST BE PRESERVED and CONSERVED** as the natural protector for Keauhou Bay hence, **for these endangered species habitat.**

**Under Section 2 (b) of the Endangered Species Act** - Keauhou Bay MUST BECOME a CONSERVATION AREA for these endangered species because it is their habitat as of today, and to allow a resort development to be built above this bay would threaten the very lives of these endangered species because it will allow golf course toxic pollution and development pollution to run into these species natural habitat, which is Keauhou Bay.

Keauhou Bay has trees and land just under the golf course (that Kamehameha Schools wants to clear for their bungalow resort) that protects Keauhou Bay from a lot of algae blooms because it soaks up pollution that is runoff from fertilizer, weed killer... in the golf course, and unfortunately when there is a severely heavy rain storm the land up on top of the bay has a greater runoff than normal from the golf course pollution, and pollution foam and algae blooms happen because of it.

If you clear this land, this kind of algae bloom will happen a lot more often and end up killing a lot of coral and marine life as stated in the many articles that will follow.

One of these articles is in the Global Coral Reef Alliance. They researched the reef before and after a golf course development, and even though this development is not a golf

course development, it is still a development and it will also be located just under a golf course and this will allow the pollution from the golf course to come down to the bay a lot more often because the natural land that soaks up this pollution will be gone.

### **Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?**

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Cuana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution. . " <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING KEAHOU BAY'S ECOSYSTEM because the golf course runoff won't have the best protection which is the natural trees and land that can soak up the polluted water most of the year and polluted foam algae blooms will happen a lot more often.

Here is another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef

...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

### **Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?**

This needs to be fully known because you will be changing an entire ecosystem to build a bungalow resort. Because it rains in Keauhou Bay many nights out of the year and the land they want to clear absorbs the golf course toxins so this bay is not as severely polluted as it will be with pavement and development, and when serious storms come Keauhou Bay won't stand a chance because the land can't keep ALL golf course pollutions out during this time and pavement won't even come close.

"If there are [toxic algal blooms](#), like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam.

When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

### **Federally Protected Green Sea Turtle Swim in Keauhou Bay Often**

The green sea turtle that is federally protected and can be seen in Keauhou Bay weekly. Please see the following article that states "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES

### **Why does Hawaii have a runoff problem?**

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

If you allow this development it WILL POLLUTE Keauhou Bay as the above article (that was written in 2014 because runoff water from developments were polluting the ocean even then) states, and this bay holds many sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals that have rested on the dock before and...that will ALL be harmed by the more severe pollution runoff that WILL happen because developments can't help but pollute the water nearby.

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL, and if a resort is allowed to be built, that will bring a lot more people down to Keauhou Bay and if a monk seal is resting they most likely will disturb the monk seal with their selfies because it is fully known this is now a SELFIE CULTURE.

### **Has the EIS done any research on what a high population would do in such a small area, and what will happen to the endangered species that live there because it's their habitat and a high population will change this bay forever?**

This information is by NOAA Scientist, "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media.

There's a seal on the beach! Let's go get a 'sealfie!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In [a recent study](#), NOAA scientists used social media to monitor human activities around endangered [Hawaiian monk seals](#). They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-city-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

### **Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?**

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, in Hilo, Puna, and there are Ocean View and Volcano housing construction projects as well. The entire Big Island has construction projects all over.

### **Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?**

Because, "Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises.

Worldwide, hotels produce almost [300,000 tonnes of waste](https://www.homebiogas.com/blog/hotels-waste-management/) each year." <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means these resources and infrastructures will be taxed even more in the near future.

Please read the below articles that prove that Big Island doesn't have the resources or infrastructure for a Bungalow Resort Development because it will increase the need for resources and infrastructure that the island doesn't have as of today.

### **Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill**

September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years. (File photo)

Of the 900 total votes in our most recent poll, which asked people to weigh in on the best way to extend the life of the Big Island's [only remaining landfill](#), all of the above was the most popular answer, garnering 274 votes, or 30%.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

### **A county commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill**

By [Megan Moseley](#) September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Kaahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

### **Time's Up For Landfills**

#### **'Gentle' demolition strategies can help preserve resources**

**PAULA BENDER April 2, 2024**

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

### **Drought Conditions On Hawai'i Island Prompt Water Supply Message**

**by Big Island Video News**

**on Oct 5, 2023 at 3:59 pm**

**(BIVN)** – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information **from the U.S. Drought Monitor**. There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawai%CA%BBi-island-prompt-water-supply-message/>

**U.S.**

**Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**

By **Li Cohen**

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to [significant droughts](#), and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the [world's largest surfing wave pool](#) opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe."

"We are in a [water crisis](#), that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawai'i, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "**We may come to a point where we have to decide ... who gets water and who doesn't.**"

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island parts need to be shipped and the power plant has generators that are not working and because of this, and other reasons, the Big Island needs to seriously conserve power so that everyone will have power, and if this problem of shipping parts can happen once it can happen again.

UTILITIES

UPDATE: HECO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HECO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity use is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs

to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power>

### **Big power supply problems continue to plague Hawaii island**

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

### **Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.**

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

### **What You Need To Know**

#### **-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity**

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-if there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

### **Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?**

**Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? Because they will have employees with cars, guests with cars, visitors with cars and this would range at times at least over 200 cars or more, parking above Keauhou Bay causing serious car population because of all these added cars right next to the bay.**

Article below is from NOAA.

### **What is the biggest source of pollution in the ocean?**

#### **Most ocean pollution begins on land.**

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or **construction sites can run off** into waterways, harming fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

### **News Release September 28, 2022**

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a [new report](#) from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil

pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20says%20a%20new>

The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwaterstphedds.org.au/blog/the-impact-of-stormwater-car-emissions/>

**Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?**

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behaviour of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

## OCEANS POLLUTION

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation>.

[districts,#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.](#)

**What is ocean noise?**

"Ocean noise refers to sounds made by human activities that can **interfere with or obscure** the ability of marine animals to **hear natural sounds in the ocean**.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

**The Chesapeake Bay has a foundation that is trying to save it due to runoff pollution that was caused by developments, and the Chesapeake Bay is a lot bigger than Keauhou Bay.** If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed because this bay is very small.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...**runoff is a significant source of harmful nitrogen pollution that continues to grow...**

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

**Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.**

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20leopardy.>

**If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay because it is so much smaller than the Chesapeake Bay.**

**Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?**

**Because the studies below show developments kill coral, marine life and zooplankton are kill and negatively affected as well, and zooplankton is the manta ray food. Manta rays are in this bay every night to eat zooplankton and sometimes they are in this bay during the day time too.**

If you allow this bay to be development you will be allowing all types of marine life to die and there is NO WAY to stop this from happening because polluted runoff rain water from developments can't be fully stopped. It is what has happened in ALL coastal developments.

Please read the Scientific proof below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii". Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide...

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off). " <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,had%20catastrophic%20impacts%20state%20wide.>

This article is by the Coral Reef Alliance here in Hawaii. "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawai%CA%BBIs%20reefs%20face%20major%20global,into%20Hawai%CA%BBIs%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is,"We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. **Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress.** In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all Aquatic Life there, and even the Manta Rays that go there to eat zooplankton from the Manta Ray tours at night, and they eat it during the day in that area as well because they need to eat 5 times their body weight in zooplankton daily. Please see the cited information below.

**"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.**

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

**Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species."** <https://oceanservice.noaa.gov/facts/coral->

[pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species.](#)

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0>  
O#:~:text=Coastal%20development%20and%20runoff%20lead,service%20that%20coral%20reefs%20provide.

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

The manta rays go to Keauhou Bay every night to eat zooplankton and if you allow this development that WILL have runoff water, you WILL be causing zooplankton to be seriously affected because as this article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem...

Here is another article that proves runoff from development in this area will hurt and kill plankton, by **Frontiers in Marine Science**, "**Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon. The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment.**" <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

"Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creates/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

Here is a research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "**Toxic Effects of Pollutants on Plankton. There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation.**" [https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3\\_6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3_6_chapter12_257-274.pdf)

The above articles show that development of Keauhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this could cause the manta ray food source to disappear and that will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on the manta ray tour for their income.

**Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?**

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, **there likely be more than 6,300 people descending on Kona...**" <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

**Where are the EIS reports on human density because this resort will increase this area in population by hundreds. Below are reports that human population destroy coral reefs.**

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the **destruction of sensitive marine habitats** such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of **sediments** into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its

inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will forsure bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regards to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of **Hawaii** every year are wreaking havoc on its natural **environment** -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in **Nature Sustainability**." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20study%20said.>

If you allow this resort to be developed, you will be destroying the coral reefs in the bay because this bay is extremely small and used by a lot of locals already for fishing, canoeing, swimming, snorkeling, paddle boarding, surfing, boating...it can't afford more use by many thousands more people yearly.

if you allow Keauhou Bay to be development there will be a higher population in the bay and that will hurt the coral in the bay as well, because it's known that, "Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with metapopulation theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation

management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaJhJjAnWAq453trRgN0iAJWle9jinR3ZotV0PyCzA5lc\\_H0O1zcHNIIP3ASnhcgkRY6\\_vkLPw49qdbmBYoX5g3YIMgOIGBZsapdGUHI7O1SLbu9x5Pr3xED4KxI4ToSjIvgQ1a7ZzR3rUbraxpodJd2AoNISMmWwSuxB7JIEDdJj8OCJpX7JTJWdCFxvFKJIZYeNdcJj3Ssw\\_dnaUg5ZihciPBdImmaH15vgI5O%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaJhJjAnWAq453trRgN0iAJWle9jinR3ZotV0PyCzA5lc_H0O1zcHNIIP3ASnhcgkRY6_vkLPw49qdbmBYoX5g3YIMgOIGBZsapdGUHI7O1SLbu9x5Pr3xED4KxI4ToSjIvgQ1a7ZzR3rUbraxpodJd2AoNISMmWwSuxB7JIEDdJj8OCJpX7JTJWdCFxvFKJIZYeNdcJj3Ssw_dnaUg5ZihciPBdImmaH15vgI5O%3D&tracking_referrer=abcnews.go.com)

**A Resort Development Will Increase Traffic on Already Severely Trafficked Roads. Where are the traffic study reports for this EIS because with 150 rooms comes over 150 cars because you must include employee cars, as well as visitors for the people staying in the resort, and what if the guests have more than one car?**

The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side.

Allowing another resort to be developed will bring more cars that will lead to a lot more traffic that the island can not handle, please read the articles below by different NEWS companies that prove this point.

This NEWS article by Hawaii News Now, "Report shows alarming surge in Hawaii island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Please watch their video on their link below because it is a professional report on Big Island traffic <https://www.hawaii.newsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists comes more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii island has most traffic fatalities in state, This time last year Hawaii island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks...

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is the same for Big Island. The traffic problems they talk about are the same issues here on Big Island, and this article also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

Please, watch the NEWS video below on aerial footage in Hilo because the footage shown is the same thing that is happening on Alii Drive and Queen K HWY, and for the same reasons, all of these roads only have 2 lanes.

There are 2 developments already on Alii Dr. being built as of today, and more are scheduled for this road in the near future, and Alii Dr. and Queen K HWY are the roads Kamehameha Schools Bungalow Resort will be using if approved and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems, traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well.

See the photo below that proves this point in Kona, and here is the NEWS article by KITV NEWS that talks about Hilo and the same thing is happening in Kona on the roads Kamehameha Schools wants to develop their resort, "Hawaii island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash on Alii Dr. and when there is an accident on this road, it turns into only one lane that needs a flagger to help direct traffic. and that adds even more traffic to this already seriously congestion road, and Kamehameha Schools wants to add a resort on this road that will increase the traffic by 100's of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=-FQ5snPDjI8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Please read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawai'i Island...

Here are some other statistics that are even more staggering:

- 28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees
- 13% of pedestrians hit at 20 mph actually suffer fatality
- 73% of pedestrians hit at 40 mph suffer fatality
- 25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!
- 56% of fatal crashes were the result of alcohol or drugs
- 41% of fatal crashes occurred in light trucks and vans
- 49% of crashes occur during the day, outside of peak traffic hours
- Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path as well as The Law of the Splintered Paddle below <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

### **The Law of the Splintered Paddle**

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law, "[K?n?wāi M?malahoe](#)," or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless (especially k?puna and keiki) across Hawai'i be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, the law is part of Hawai'i's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

**The Law of the Splintered Paddle is also on Kamehameha Schools website**, so they should want to help make Big Island roads become safer and not add to the traffic and possible traffic death toll problem. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-true-200-years-after-k>

**Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious Resource and Infrastructure issues. Please read the articles below.**

### **The Big Island Doesn't Have the Resources and Infrastructure for Another Resort**

Please see the articles below because the Big Island doesn't have the resources or infrastructure to safely add another resort development on island and these other NEWS and Research articles prove this point.

1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges in Dealing With Its Waste Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables--18286076.php>

5) "The overwhelming plastic waste Hawaii visitors leave behind By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A county commission drafts ordinance aiming to ban recyclables at West Hawaii landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawai'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawai'i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealahou sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawai'i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawai'i Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "BIG ISLAND NEWS HECO restores power after initiating emergency outages on Big Island by: Elizabeth Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 . 5:23 PM HST  
\* Updated February 14, 2024 . 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) "LOCAL NEWS

HECO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawika Uyehara, deputy director of Hawaii County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) U.S. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues  
By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "we're in deep trouble."

27

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) NewsHawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 . 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawaii Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawaii, the Hawaii County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-CABBI-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

20) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnua73/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/](https://www.reddit.com/r/BigIsland/comments/1bnua73/hawaiian_electric_is_reporting_that_several_large/)

21) "NewsHawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 . 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

28

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will damage Keauhou Bay coral and marine life and, Big Island resources and infrastructure are currently being negatively affected from the development that is on island already, and there are years of new development that have already been approved, before having safe resources and infrastructures for new developments.

With these scientifically proven articles by some of the most professional scientists in the world, they say the a serious population increase, as well as development and resort runoff that happens because of parking lots, and... with all coastal developments, it will be dangerous for Keauhou Bay to be development because it will damage the marine ecosystems in the area.

Please, save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools because all of these articles prove it would be extremely damaging to the waters at Keauhou Bay.

Thank you,

Sincerely,

Mayari Sherina Ong

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**From:** Koohan Paik-Mander <[REDACTED]>  
**Sent:** Tuesday, August 6, 2024 7:24 PM  
**To:** 221053-01 KS Keauhou Entitlements; Alex.Roy@hawaicounty.gov; Planning@hawaicounty.gov; Keauhoubay@ksbe.edu  
**Subject:** Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT!

**Categories:** Yellow Category

To whom it may concern,

Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keauhou Bay.

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff."

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endangered these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,  
Koohan Paik-Mander

## Johanne Parker

I walk down to and through the Bay by the Canoe Club every day. I believe that it needs serious clean-up, restructuring of the parking, congestion and some enhancements. I do NOT believe more housing is needed in this area... that will simply add to the congestion, pollution and disruption to this lovely area.

It's wonderful to have a place that does NOT feel like a resort. It does however need care. Perhaps Kamehameha Schools should focus on caring for what it already has, instead of creating what we don't need.  
Thank you.

## Stuart Parker

Another development in this special area will only serve to enrich developers and Kamehameha Schools' pocketbooks...there is nothing in this proposal that benefits those of us who live here. I walk and use the bay every day and what strikes me as odd is the lack of care and respect for the area by the owner...Kamehameha Schools. Do something about the parking lot, the toxic trash can in the boat parking area, but don't give us more STVR/vacation rentals - ENOUGH VACATION RENTALS. Use your \$14Billion in assets for educating the locals and give them a chance at a better life - not one working in hospitality you want to build! Keep Keauhou Bay old-school.

## Kaleolani Pasciuta

My sister Leiola August wrote an amazing comment that I am attaching below as our ohana stands united.

"I was fortunate enough to be born as the granddaughter to a very special wahine. Tutu or aunty Lily Kong who was the last person to be born and raised in Keaou Bay. She dedicated her life to the preservation of the bay and through her I learned about our cultural heritage as Hawaiians and the rich history and culture of Keaou Bay.

There is no place that still exists like Keaou Bay. Having been the birth site and home site to many of our ali'i signifies its importance to Hawaiian culture and indigenous people. Its ability to self-sustain its population and those of neighboring ahupua'a through recent history makes this a very special place that could be lost if KS chose to develop the property to its full capacity of 700+ units vs the 150 units it proposes.

Contrary to what some people have recently said of my grandmother, she was not against development. She was against certain developments and development in ways that did not properly care for the land, preserve cultural and historical sites and displaced indigenous people. She knew, with no modern industry other than tourism, that development was inevitable in Kona. Without development such as all the condos, hotels and vacation rentals that surround Keaou Bay where would people who wanted to vacation here stay? Where would people who wanted to move here live? Without the economic contributions of those people how would future generations live in this modern, technological society?

She knew that in order for the following generations to thrive in a modern world that new skills through education would be required, but how are indigenous keiki going to be educated? How would they obtain the skills and resources to make a life among outsiders who had more economic and educational resources than we had here? Our princess Pauahi, through her schools and education programs are one of the few ways keiki would be able to learn those skills. She understood, and I currently live, the complex and complicated dichotomy of preserving our 'aina and culture while living in a modern world.

I'd like to make it clear that my preference is to see no further development in the bay and to actually remove certain features such as the seawalls that cover the beach and the restroom at Kailiinehe that covers the spring and stop all commercial activity in the bay so the bay can return to its natural state. However, I also know that some of this is not realistic and therefore appreciate a private landowner who is willing to work with the community to ensure the property is developed with community involvement and with as much integrity as possible.

Volume I section 6.1 states: "Without comprehensive improvements, the Kamehameha Schools-owned properties would remain underutilized and underperforming financially".

It might be helpful for those who oppose this development to understand that KS and the trustees are bound by the trust to financially increase the endowment for our lahui. I welcome those opposed to this development and KS to think outside the box and offer another avenue for these lands that

will achieve the desired financial benchmark other than a commercial and resort development. Those opposed, please understand that without meeting this financial benchmark or offering some other source of educational or financial support, you are continuing to displace indigenous Hawaiians and taking away from our lahui.

Regarding the "underutilized" portion of the above statement I do feel as though we should leave some of these areas as just that. Not utilized at all. I do believe and appreciate that our cultural sites are to be preserved with this new plan, but want to ensure that KS recognizes and understands that there is increasing sensitivity amongst indigenous Hawaiians as to not market our culture for financial gain or for our culture to be on display as a novelty. As a suggestion, let the families or those organizations that bear the responsibility of maintaining those sites or take ownership of the cultural significance of those sites, the freedom to choose who, how and if those sites, customs and history shall be shared.

Pollution - My tutu always spoke about the pollution and overuse of the bay. I do see that there is a plan to connect current and future facilities to the He'eia sewer system. Also, implementing water runoff solutions to eliminate further pollution of the bay will be imperative.

Commercial & Recreational Tenant Selection - I would like to see more clarity on the criteria for use and tenant selection in commercial and recreational spaces. Priority should be given to tenants who have a low impact on the bay and are inclusive of indigenous customers/participants, rather than those with a high impact and culturally exclusive practices. The same low impact and culturally inclusive criteria should be applied to recreational tenants, favoring those who are sensitive to cultural considerations over those who are high impact and exclusive.

Volume I section 3.1.5 paragraph 4 talks of the the Kau cemetery, which was where my great grandfather and other family members along with other families that inhabited the bay were laid to rest. Also, volume II page 112 and 113 notes that Ilina (burial sites) and 'Iwi (bones) should be left in place. I appreciated Malay and Malay's recommendation to follow my kupuna's wishes to leave any Ilina and 'Iwi in place. However, even though my family's Ilina located mauka of the current volleyball court and mauka of the old Kona road has since been bulldozed by Mr. Post from Texas to build his golf course and our ohana's 'Iwi has since, without our approval, been relocated. My immediate ohana and I wish that the Ilina Kau to no longer be used as a golf course and to be further left alone. It does seem that figure 3-34 and figure 3-35 honors those wishes and that no further development would take place in that area.

In case I was not clear before, the restrooms/comfort station at Kailiinehe beach must be relocated to allow for the spring can flow.

Furthermore, to any party who is using my ohana's mo'olele for commercial or monetary advancement or to further advance your position we ask you to stop. My tutu willingly and freely shared her mo'olele and mana'o so it would not be lost, but that does not mean that permission was granted to be used in connection with individual gain. Her mo'olele and her mana'o live through us, her living descendants.

I'd like to commend KS on its willingness to listen to and include community and kupu'aina involvement as this is only the second time (that I am aware of) a landowner in the bay has sought out the opinion of those with interests in the bay. We mahalo you for including us and ask that our

ohana continue to be consulted as the progress of this project."

**From:** Belinda Pate <[REDACTED]>  
**Sent:** Sunday, July 28, 2024 5:40 PM  
**To:** 221053-01 KS Keaouhou Entitlements  
**Subject:** Opposition to Keaouhou Bay  
**Categories:** Green Category

Aloha, as a concerned citizen, I expect the authorities to protect our delicate ecosystem. I am appalled that I am in the position to have to defend our land.

Please read the scientific proof in this letter and **REJECT** Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort **WILL** have a **SERIOUS NEGATIVE IMPACT** on Keaouhou Bay as stated in all the different researched articles below.

Please, **DO NOT** risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is **scientifically proven** that developments pollute nearby waters both **during and after development**.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have **ALWAYS** polluted the water in **EVERY** coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development **WILL be CHANGING an Entire Ecosystem**.

#### **ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT**

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

### **Endangered Species Act**

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

### **FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED**

The green sea turtle is federally protected and can be seen in Keauhou Bay weekly.

The following article states: "**POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES**"

#### **Why does Hawaii have a runoff problem?**

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

**Allowing this development WILL POLLUTE Keauhou Bay.** The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!)

states this fact clearly. Keauhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen **because developments have been shown to ALWAYS pollute the water is that is nearby.**

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the [Endangered Species Act \(ESA\)](#) and additionally protected by [Hawaii Revised Statutes Chapter 195D \(HRS\)](#) and [Hawaii Administrative Rules \(HAR\) 13-124.](#)" This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

### **THE ENDANGERED MONK SEAL WILL BE AFFECTED**

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keauhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

**Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keauhou Bay will likely be changed forever.**

This information is from a NOAA Scientist; "**Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'!**" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In [a recent study](#), NOAA scientists used social media to monitor human activities around endangered [Hawaiian monk seals](#). They discovered that human disturbance is more common than they thought. "<https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the [Marine Mammal Protection Act \(MMPA\)](#), as well as locally by Hawai'i Revised Statutes (HRS) [Chapter 195D](#) and Hawai'i Administrative Rules (HAR) [13-124](#)." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "

Most drains have a single large exit at their point of discharge (often covered by a [grating](#)) into a canal, river, lake, [reservoir](#), sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEE-7.15.14.pdf> where **the Hawaii'i government states that Natural**

**Ground Cover has 10% runoff, where the Hawaii'i government has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keauhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.**

**These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.**

Under Section 2 (b) of the Endangered Species Act -- **Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species.** It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

**ALGAE BLOOMS KILL CORAL AND MARINE LIFE**

**Keauhou Bay is the monk seals and the green sea turtle's habitat.** Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. **By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.**

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to **protect the land around Keauhou Bay** from developments that destroy the habitat of these endangered species with pollution and runoff.

**Does this EIS have any reports on the endangered species that frequent Keauhou Bay? This is their habitat and it needs to be "conserved".**

Under the **Conservation Program** there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project.

**GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS**

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

**Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.**

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course development. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

**Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?**

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development..The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution.. . <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral

diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

**Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?**

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

**FURTHERMORE:** "If there are [toxic algal blooms](https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef), like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

## ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

**Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?**

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

**The article below is from NOAA regarding motor vehicle engines and pollution to the sea.**

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run

off into waterways, harming fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines.Dirt%20can%20be%20a%20pollutant.>

### **Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects**

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a [new report](#) from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearly%2085%20percent.pipeline%20spills%20says%20a%20new>

### **The Impact Of Stormwater – Car Emissions**

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershepherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

### **NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE**

#### **Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?**

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

### **How Does Noise Pollution Harm Marine Species?**

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

if you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

### **What is ocean noise?**

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats."

<https://oceanservice.noaa.gov/facts/ocean-noise.html>

### **LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS**

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is **a lot bigger** than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

**This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states,** "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20arrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

### **MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN**

**Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?**

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

### **It's Been Proven Developments Severely Pollute Nearby Waters**

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide..."

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban runoff)." <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,hard%20catastrophic%20impacts%20state%20wide.>

**This article is by the Coral Reef Alliance here in Hawaii.** "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian->



Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon. The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. **This occurred in a relatively short time considering that the experiment lasted less than three weeks.** The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

**The ecosystem is fragile and interconnected as is stated in this article:** "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO.

<https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "**Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage.** Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area,

the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

## HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

**Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?**

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: **The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life.**" <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

**Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.**

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal>



"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. **Worldwide, hotels produce almost 300,000 tonnes of waste each year.**" <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keaouhou Bay. On Hawaii's Island, we are already struggling to meet the increasing need for resources and infrastructure.

#### **Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill**

September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

#### **A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill**

By [Megan Moseley](#) September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Kā'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

#### **Time's Up For Landfills**

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

### **Drought Conditions On Hawai'i Island Prompt Water Supply Message**

by Big Island Video News  
on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information from the [U.S. Drought Monitor](#). There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

### **From a Water Supply news release:**

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawai%CA%BB-island-prompt-water-supply-message/>

[U.S.](#)

### **Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**

By [Li Cohen](#)

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to [significant droughts](#), and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the [world's largest surfing wave pool](#) opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe."

"**We are in a water crisis, that has to be made very clear,**" Wayne Tanaka, director of Sierra Club of Hawai'i, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

### **UPDATE: HELCO asks for continued energy conservation**

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity use is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

**Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.**

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

### **Big power supply problems continue to plague Hawaii Island**

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

**The company explained that it faces an "extremely tight" supply of power at peak use periods**, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

### **Hawaii Island customers urged to reduce electricity use through April**

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

**-If there is not enough electricity to meet demand**, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

### **FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES**

#### **A Resort Development Will Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?**

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawai'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new

report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%. "Watch the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "**Hawaii Island has most traffic fatalities in state**". This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

**"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here,"** he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

**The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.**

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: **All of these roads only have two lanes!**

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FQSnPDjI8>

**Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.**

**Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:**

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii's Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

**“That’s just Big Island traffic,”** is a common sentiment. But what if we didn’t have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?”

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

#### **MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC and WASTEWATER:**

##### **1) Hawaii Deals with Burgeoning Waste Management Problem**

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

“Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.” <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

**2) “Big Island Now readers seem to agree that there’s likely no single solution for slowing down the timeline of the West Hawai’i Sanitary Landfill reaching capacity.**

The West Hawai’i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.” <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

**3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste** Hawai’i Public Radio Published January 9, 2020 at 5:00 AM HST

“Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona.” <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

**4) “What happens to Hawaii Island’s trash and recyclables?”** BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 1 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support.” <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

##### **5) “The overwhelming plastic waste Hawaii visitors leave behind**

By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists’ first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips.”

<https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

**6) “A County commission drafts ordinance aiming to ban recyclables at West Hawai’i landfill** By Megan Moseley September 6, 2023 · 1:00 AM HST

\* Updated September 6, 2023 · 2:02 PM

Hawai’i County’s Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island’s only working landfill.” <https://bigislandnow.com/2023/09/06/new-draft-ordinance-atms-to-ban-recyclables-at-west-hawaii-landfill>

**7) “Hawai’i County issues mandatory 25% water restriction for North Kona** August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.” <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

**8) "Hawaii's Water Supply Closely Monitored As Severe Drought Continues** by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-under-severe-drought/>

**9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant** Keakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

**10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters** Hawaii'i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii'i Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

**11) "Kona coast faces stark wastewater tradeoffs**, Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

**12) "HELCO restores power after initiating emergency outages** on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

**13) Hawaii's State News Update: Hawaiian Electric initiates rolling outages** throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

**14) HELCO issues rolling power outages around Big Island** by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

**15) "Here's how power outages can have repercussions** for Hawaii's water supply Hawaii'i Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii'i Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawika Uyehara, deputy director of Hawaii'i County's Department of Water Supply. " <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

**16) US Hawaii is "on the verge of a greater catastrophe"**, locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) News Hawai'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

**18) Hawai'i Water Supply Closely Monitored As Severe Drought** Continues

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-CA%BB-i-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

**19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."**

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/)

**20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators**

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

## **HISTORICAL AND CULTURAL SIGNIFICANCE:**

### **The Law of the Splintered Paddle**

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, **the law is part of Hawaii's State Constitution today.**

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

**"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."**

**The Law of the Splintered Paddle is also on Kamehameha Schools website.** The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

**Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.**

## IN CONCLUSION

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keauhou Bay and "The **Endangered Species Act of 1973 (ESA)** or "The Act"; 16 U.S.C. § 1531 et seq.) **is the primary law in the United States for protecting and conserving imperiled species.** Designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President [Richard Nixon](#) on December 28, 1973. The [Supreme Court of the United States](#) described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation".<sup>[1]</sup>" [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other. This land **MUST** be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come.

In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved. These issues **MUST** be solved before considering another resort development on Big Island.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is **NOT** suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen.

Please save Keauhou Bay's marine life and help the island's resources by saying **NO** to a Bungalow Resort built by Kamehameha Schools.

Mahalo,

Belinda Pate

████████████████████

████████████████████

**From:** Roslyn Patrick-Sunnes <[REDACTED]>  
**Sent:** Saturday, July 20, 2024 5:31 PM  
**To:** 221053-01 KS Keaouhou Entitlements; Alex.Roy@hawaikcounty.gov; Planning@hawaikcounty.gov  
**Subject:** Save Keaouhou Bay - Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT!  
**Attachments:** pollution-runoff.jpg; runoff-pollution-after-storm.jpg; title.jpg; swimmin-turtle.jpg; keaouhou-bay-green.jpg; monk-seal-in-keaouhou-bay2.jpg; keaouhou-bay-green-algae.jpg; green-sea-turtle.jpg

**Categories:** Green Category

To whom it may concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT in Keaouhou Bay as stated in all the different researched articles below.

Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project, because it is scientifically proven that developments pollute nearby waters constantly during development and after.

Please read these Scientific articles written by NOAA, National Oceanic and Atmospheric Administration and many other professional organizations, that have studied and proved that developments has ALWAYS polluted the water in every near coastal developed area.

**First, does this EIS have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development and golf course runoff because Keaouhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.**

**In the Endangered Species Act of 1973 Under Section 2 (b), "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.**

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawaii are protected by the Endangered Species Act (ESA) and additionally protected by Hawaii Revised Statutes Chapter 195D (HRS) and Hawaii Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawaii Revised Statutes (HRS) Chapter 195D and Hawaii Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

#### ENDANGERED SPECIES CONSERVATION

Endangered Species Act

#### **"Section 2. Findings, Purposes, and Policy**

**(4) the United States has pledged itself as a sovereign state in the international community to conserve** to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—**The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved**, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section." This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-act>

Keaouhou Bay IS the monk seals and the green sea turtle's habitat and to allow a bungalow resort to be developed in Keaouhou Bay, that is these endangered species habitat, is to threaten these endangered species habit with golf course runoff pollution, as well as development pollution and hence, threaten their habitat, hence their lives, and goes completely against the Endangered Species Act of 1973.

The words in the Endangered Species Act states, "to conserve" and conserving the endangered species that enter into Keaouhou Bay would be to NOT DEVELOP A BUNGALOW RESORT because this would cause serious pollution runoff that would pollute the bay and endanger these already endangered species, the green sea turtle and the monk seal.

Does this EIS have any reports on the endangered species that frequent Keauhou Bay because this is their habitat.

Under the Conservation Program there should be research done on endangered species and their associated ecosystems, which is Keauhou Bay. Because this bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please see that developing Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would happen a lot more often due to taking out the natural pollution filter, that is the trees and the land that is there now.

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely because of the bungalow resort development's pavement. As of right now the trees and land that this development wants to clear and develop into a bungalow resort is a Natural Pollution Filter.

Please read from **Wikipedia**.

**Most drains** have a single large exit at their point of **discharge (often**

**covered by a grating) into** a canal, river, lake, reservoir, sea or ocean. Other than catchbasins, **typically there are no treatment facilities in the piping system.**"[https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells)

It's the pavement that this development wants to put in that will cause a lot of pollution to runoff into Keauhou Bay because this top land that is directly below the golf course (that they want to clear) soaks in the golf course pesticides, fertilizer, weed killer... and is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pollution.

Please see this site at <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEE-715174.pdf> because on page 2 it **states from the Hawaii' government that Natural Ground Cover has 10% runoff, where has development has 55% runoff.**

**These trees and land** are saving monk seals and green sea turtles habitat from the golf course pollution and this land **MUST BE PRESERVED and CONSERVED** as the natural protector for Keauhou Bay hence, **for these endangered species habitat.**

**Under Section 2 (b) of the Endangered Species Act** - Keauhou Bay MUST BECOME a CONSERVATION AREA for these endangered species because it is their habitat as of today, and to allow a resort development to be built above this bay would threaten the very lives of these endangered species because it will allow golf course toxic pollution and development pollution to run into these species natural habitat, which is Keauhou Bay.

Keauhou Bay has trees and land just under the golf course (that Kamehameha Schools wants to clear for their bungalow resort) that protects Keauhou Bay from a lot of algae blooms because it soaks up pollution that is runoff from fertilizer, weed killer... in the golf course, and unfortunately when there is a severely heavy rain storm the land up on top of the bay has a greater runoff than normal from the golf course pollution, and pollution foam and algae blooms happen because of it.

If you clear this land, this kind of algae bloom will happen a lot more often and end up killing a lot of coral and marine life as stated in the many articles that will follow.

One of these articles is in the Global Coral Reef Alliance. They researched the reef before and after a golf course development, and even though this development is not a golf course development, it is still a development and it will also be located just under a golf course and this will allow the pollution

from the golf course to come down to the bay a lot more often because the natural land that soaks up this pollution will be gone.

### **Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?**

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease caused by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development..The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution..  
". <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING KEAHOU BAY'S ECOSYSTEM because the golf course runoff won't have the best protection which is the natural trees and land that can soak up the polluted water most of the year and polluted foam algae blooms will happen a lot more often.

Here is another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef

...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

### **Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?**

This needs to be fully known because you will be changing an entire ecosystem to build a bungalow resort. Because it rains in Keauhou Bay many

nights out of the year and the land they want to clear absorbs the golf course toxins so this bay is not as severely polluted as it will be with pavement and development, and when serious storms come Keauhou Bay won't stand a chance because the land can't keep ALL golf course pollutions out during this time and pavement won't even come close.

"If there are **toxic algal blooms**, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

### **Federally Protected Green Sea Turtle Swim in Keauhou Bay Often**

The green sea turtle that is federally protected and can be seen in Keauhou Bay weekly. Please see the following article that states "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES

#### **Why does Hawaii have a runoff problem?**

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste..

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

If you allow this development it WILL POLLUTE Keauhou Bay as the above article (that was written in 2014 because runoff water from developments were polluting the ocean even then) states, and this bay holds many sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals that have rested on the dock before and..that will ALL be harmed by the more severe pollution runoff that WILL happen because developments can't help but pollute the water nearby.

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL, and if a resort is allowed to be built, that will bring a lot more people down to Keauhou Bay and if a monk seal is resting they most likely will disturb the monk seal with their selfies because it is fully known this is now a SELFIE CULTURE.

**Has the EIS done any research on what a high population would do in such a small area, and what will happen to the endangered species that live there because it's their habitat and a high population will change this bay forever?**

This information is by NOAA Scientist, "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media.

There's a seal on the beach! Let's go get a 'selfie!'" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In [a recent study](#), NOAA scientists used social media to monitor human activities around endangered [Hawaiian monk seals](#). They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

**Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?**

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, in Hilo, Puna, and there are Ocean View and Volcano housing construction projects as well. The entire Big Island has construction projects all over.

**Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?**

Because, "Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises.

Worldwide, hotels produce almost [300,000 tonnes of waste](#) each year." <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means these resources and infrastructures will be taxed even more in the near future.

Please read the below articles that prove that Big Island doesn't have the resources or infrastructure for a Bungalow Resort Development because it will increase the need for resources and infrastructure that the island doesn't have as of today.

**Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill**

September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years. (File photo)

Of the 900 total votes in our most recent poll, which asked people to weigh in on the best way to extend the life of the Big Island's [only remaining landfill](#), all of the above was the most popular answer, garnering 274 votes, or 30%.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

**A county commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill**

By [Megan Moseley](#) September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Kāhūmanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

### Time's Up For Landfills

**'Gentle' demolition strategies can help preserve resources**

**PAULA BENDER April 2, 2024**

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns

that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary. <https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

### Drought Conditions On Hawai'i Island Prompt Water Supply Message

**by Big Island Video News**  
on Oct 5, 2023 at 3:59 pm

**(BIVN)** – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information **from the U.S. Drought Monitor**. There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawaii%CA%BB-i-island-prompt-water-supply-message/>

### U.S.

**Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**

By [Li Cohen](#)

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to [significant droughts](#), and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the [world's largest surfing wave pool](#) opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. " ... We are on the verge of a greater catastrophe."

"We are in a [water crisis](#), that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawaii, told CBS News, saying that if the reasons for this crisis aren't soon addressed, **"We may come to a point where we have to decide ... who gets water and who doesn't."**

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island parts need to be shipped and the power plant has generators that are not working and because of this, and other reasons, the Big Island needs to seriously conserve power so that everyone will have power, and if this problem of shipping parts can happen once it can happen again.

#### UTILITIES

UPDATE: HECO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HECO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity us is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

#### Big power supply problems continue to plague Hawaii island

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

**Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.**

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and

hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15 % of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

#### **What You Need To Know**

**-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity**

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

**Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keaouhou Bay?**

**Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keaouhou Bay, what traffic and increased population studies have they done? Because they will have employees with cars, guests with cars, visitors with cars and this would range at times at least over 200 cars or more, parking above Keaouhou Bay**

**causing serious car population because of all these added cars right next to the bay.**

Article below is from NOAA.

**What is the biggest source of pollution in the ocean?**

**Most ocean pollution begins on land.**

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or **construction sites can run off** into waterways, harming fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

**News Release September 28, 2022**

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a [new report](#) from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20D%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20says%20a%20new>

The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershepherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

### **Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?**

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behaviour of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

### OCEANS POLLUTION

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

### **What is ocean noise?**

"Ocean noise refers to sounds made by human activities that can **interfere with or obscure** the ability of marine animals to **hear natural sounds in the ocean**.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

**The Chesapeake Bay has a foundation that is trying to save it due to runoff pollution that was caused by developments, and the Chesapeake Bay is a lot bigger than Keauhou Bay.** If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed because this bay is very small.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...**runoff is a significant source of harmful nitrogen pollution that continues to grow...**

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

**Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou**

**Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.**

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20leopardy>.

**If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay because it is so much smaller than the Chesapeake Bay.**

**Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?**

**Because the studies below show developments kill coral, marine life and zooplankton are kill and negatively affected as well, and zooplankton is the manta ray food. Manta rays are in this bay every night to eat zooplankton and sometimes they are in this bay during the day time too.**

If you allow this bay to be development you will be allowing all types of marine life to die and there is NO WAY to stop this from happening because polluted runoff rain water from developments can't be fully stopped. It is what has happened in ALL coastal developments.

Please read the Scientific proof below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide...

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and

human impacts (sewage effluent and urban runoff). " <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event>.  
[hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,hard%20catalytic%20impacts%20state%20wide](https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event).

This article is by the Coral Reef Alliance here in Hawaii. "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff...

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawai%20reefs%20face%20major%20global,into%20Hawai%20CA%20waterways%20every%20day>.

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019...

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. **Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban runoff, may be exacerbated under high thermal stress.** In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all Aquatic Life there, and even the Manta Rays that go there to eat zooplankton from the Manta Ray tours at night, and they eat it during the day in that area as well

because they need to eat 5 times their body weight in zooplankton daily. Please see the cited information below.

**"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.**

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

**Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development, can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species."** <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_coral/coral09\\_humantthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organism%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_coral/coral09_humantthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organism%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_coral/coral09\\_humantthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_coral/coral09_humantthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

The manta rays go to Keauhou Bay every night to eat zooplankton and if you allow this development that WILL have runoff water, you WILL be causing zooplankton to be seriously affected because as this article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that proves runoff from development in this area will hurt and kill plankton, by **Frontiers in Marine Science**, "**Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment.**" <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

"Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the

zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO.

<https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

Here is a research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "**Toxic Effects of Pollutants on Plankton** **There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation.**" [https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

The above articles show that development of Keauhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this could cause the manta ray food source to disappear and that will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on the manta ray tour for their income.

**Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?**

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, **there likely be more than 6,300 people descending on Kona.**" <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting

Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitrs-for-respect/>

**Where are the EIS reports on human density because this resort will increase this area in population by hundreds. Below are reports that human population destroy coral reefs.**

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the **destruction of sensitive marine habitats** such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of **sediments** into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/libray/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its

inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will force bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regards to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%20a%20new%20study%20said.>

If you allow this resort to be developed, you will be destroying the coral reefs in the bay because this bay is extremely small and used by a lot of locals already for fishing, canoeing, swimming, snorkeling, paddle boarding, surfing, boating...it can't afford more use by many thousands more people yearly.

if you allow Keauhou Bay to be developed there will be a higher population in the bay and that will hurt the coral in the bay as well, because it's known that, "Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead

to more runoff and siltation. Effects of human perturbations can be explored with metapopulation theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii. Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaJhJAnWAq453tRqNOAJWeI9inR3ZoTvOPyGZA5ic\\_H00JzcHNIP3ASnhcgKRY6\\_VKLPw49dbmBYoXSg3YIMgOIGBZsabdGUH7OISLbu9x5Pr3xED4KxI4T0sJvgQ1a7Z2Rt3rUbraxpodJd2AonISMWSuxB7JjEDdpj8OGJpx7TJTWdCfXvFKJZYeNdcj3Sw\\_dhaUg5ZlhcjPBdImmaH15yqT5O%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaJhJAnWAq453tRqNOAJWeI9inR3ZoTvOPyGZA5ic_H00JzcHNIP3ASnhcgKRY6_VKLPw49dbmBYoXSg3YIMgOIGBZsabdGUH7OISLbu9x5Pr3xED4KxI4T0sJvgQ1a7Z2Rt3rUbraxpodJd2AonISMWSuxB7JjEDdpj8OGJpx7TJTWdCfXvFKJZYeNdcj3Sw_dhaUg5ZlhcjPBdImmaH15yqT5O%3D&tracking_referrer=abcnews.go.com)

**A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads. Where are the traffic study reports for this EIS because with 150 rooms comes over 150 cars because you must include employee cars, as well as visitors for the people staying in the resort, and what if the guests have more than one car?**

The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side.

Allowing another resort to be developed will bring more cars that will lead to a lot more traffic that the island can not handle, please read the articles below by different NEWS companies that prove this point.

This NEWS article by Hawaii News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Please watch their video on their link below because it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists comes more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state. This time last year Hawaii island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks...

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is the same for Big Island. The traffic problems they talk about are the same issues here on Big Island, and this article also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

Please, watch the NEWS video below on aerial footage in Hilo because the footage shown is the same thing that is happening on Alii Drive and Queen K HWY, and for the same reasons, all of these roads only have 2 lanes.

There are 2 developments already on Alii Dr. being built as of today, and more are scheduled for this road in the near future, and Alii Dr. and Queen K HWY are the roads Kamehameha Schools Bungalow Resort will be using if approved and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems, traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well.

See the photo below that proves this point in Kona, and here is the NEWS article by KITV NEWS that talks about Hilo and the same thing is happening in Kona on the roads Kamehameha Schools wants to develop their resort, "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash on Alii Dr. and when there is an accident on this road, it turns into only one lane that needs a flagger to help direct traffic. and that adds even more traffic to this already seriously congestion road, and Kamehameha Schools wants to add a resort on this road that will increase the traffic by 100's of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=-FQSnPDji8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Please read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-47% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path as well as The Law of the Splintered Paddle below <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

### **The Law of the Splintered Paddle**

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law, "[K?n?wai M?malaha?e](#)" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless (especially k?puna and keiki) across Hawai'i be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, the law is part of Hawai'i's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

-Caring for and serving one's people

-Knowing and doing what is pono (right)

-Standing for the principle that leadership privilege is earned

-Taking kuleana (responsibility) for those we serve

-Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

**The Law of the Splintered Paddle is also on Kamehameha Schools website**, so they should want to help make Big Island roads become safer and not add to the traffic and possible traffic death toll problem. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

**Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious Resource and Infrastructure issues. Please read the articles below.**

### **The Big Island Doesn't Have the Resources and Infrastructure for Another Resort**

Please see the articles below because the Big Island doesn't have the resources or infrastructure to safely add another resort development on island and these other NEWS and Research articles prove this point.

1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges in Dealing With Its Waste Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) "The overwhelming plastic waste Hawaii visitors leave behind By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A county commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill By Megan Moseley September 6, 2023 · 1:00 AM HST \* Updated September 6, 2023 · 2:02 PM

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawai'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawai'i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca-bbi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealahou sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawai'i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawai'i Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12->

[20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-near-shore-waters](https://www.khonn2.com/local-news/hawaii-island-community-reaches-near-shore-waters)

11) "Kona coast faces stark wastewater tradeoffs Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "BIG ISLAND NEWS HECO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khonn2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) "LOCAL NEWS

HECO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khonn2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii'i Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii'i Island have advised customers to conserve water ahead of possible storm-related power outages this month. But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawika Uyebara, deputy director of Hawaii County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) U.S. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues  
By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "we're in deep trouble." <https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) NewsHawaii'i County issues mandatory 25% water restriction for North Kona  
August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawaii'i Water Supply Closely Monitored As Severe Drought Continues  
by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawaii, the Hawaii'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

20) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reportng\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reportng_that_several_large/?rdt=52660)

21) "NewsHawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will damage Keauhou Bay coral and marine life and, Big Island resources and infrastructure are currently being negatively affected from the development that is on island already, and there are years of new development that have already been

approved, before having safe resources and infrastructures for new developments.

With these scientifically proven articles by some of the most professional scientists in the world, they say the a serious population increase, as well as development and resort runoff that happens because of parking lots, and... with all coastal developments, it will be dangerous for Keauhou Bay to be development because it will damage the marine ecosystems in the area.

Please, save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools because all of these articles prove it would be extremely damaging to the waters at Keauhou Bay.

Thank you,

Sincerely,

Roslyn Patrick-Sunnes

[Keauhoubay@ksbe.edu](mailto:Keauhoubay@ksbe.edu)

Douglas Perrine

Polly & Mark Petersen

I am a private boater, residing in Kailua Kona, a little under 5 miles from Keauhou Bay. For the last 27 years I have launched my small boat at the boat ramps there. My concern about this plan is my ability to continue to make use of this state-owned facility. Even without the massive new development proposed in this plan, these two small boat ramps and the associated trailer parking area and wash-down area are often over-utilized, requiring a wait to launch, a wait to wash down, and sometimes a long drive to park along the shoulder of Kaleiopapa Rd. when the 16 provided trailer parking stalls are occupied. The Kamehameha Schools documents are vague, perhaps deliberately, regarding the fate of these critical trailer stalls in their plans, as well as on the continued availability of road shoulder trailer parking. The 2021 conceptual plan drawing shows these 16 stalls sort of blurred out, implying that they may be eliminated. It shows 8 new stalls a little further up the road. Without further clarification I can only assume that KS intends to cut the boat trailer parking in half. This would change the situation from a condition of frequently inadequate trailer parking to one of guaranteed frustration, aggravation, and user conflict. It's not clear if KS intends to change the current long-term boat storage area on the north side of the bay to short-term trailer parking, as it is labeled "boat trailer storage" on their drawing, but this is not a feasible solution to the day-use trailer parking problem. After parking the trailer at the north end of the bay, the boater would have to walk all the way around the bay back to the boat ramp, where there would be a line of angry boaters waiting to launch at the ramp occupied by his boat. The net effect of cutting the number of trailer parking slots near the ramp in half, for me, would be that I would be denied use of the launching ramps I have used for over a quarter of a century now. I could not justify navigating my trailer through morning rush hour traffic to reach Keauhou Bay only to find that all the trailer parking was occupied or that there was a huge line of boats waiting for the owners of the boats ahead of them to make the long walk back from the north side of the bay. Please note that the 8 proposed new stalls occupy an area of shoulder that is currently available for trailer parking, so the net gain is perhaps only 6 stalls. Presumably KS will also block or ban parking on the remaining shoulders of Kaleiopapa, eliminating at least 6 potential parking spots for a boat trailer. This would mean the net number of available trailer stalls will decrease from about 24 to 8, or a third of what is presently not quite adequate. If KS presents a plan that guarantees an increase of available boat trailer parking close to the ramp, then I will not be personally adversely affected by their development plans, as far as I can tell, but if they actually reduce the available trailer parking from 16 stalls plus shoulder parking to only 8 stalls, as implied in their diagram, I will be cut off from a cherished part of my life. All private boaters and probably most commercial operators using the Keauhou boat ramps will likewise be severely adversely affected. We can expect that some companies might go out of business, and that some boaters might become victims of the violence that sometimes occurs when alcohol mixes with boating and there is some disagreement about how much time someone is taking at a boat launch or wash down area.

# MEMO

**POLLY & MARK PETERSEN  
CAPTAIN COOK, 96704**

**To:** Kamehameha Schools  
**From:** Polly and Mark Petersen  
**Date:** August 6, 2024  
**Re:** Kamehameha Schools - Keauhou Bay Management Plan DEIS

## COMMENTS:

The Environmental Impact Statement (EIS) for the proposed development of Keauhou Bay raises significant concerns. The bay is a cherished local haven, heavily utilized by residents for a variety of water sports, and is one of the few areas not yet overrun by tourist-centric development. The current restriction of cars has successfully preserved the bay's unique character, making it less congested and more enjoyable compared to other areas in the Kona district. It's crucial to consider that the introduction of additional housing and/or retail spaces for tourists could disrupt the local ecosystem and the community's way of life. Instead of yielding to development pressures, alternative strategies such as establishing an endowment could be explored to enhance Kamehameha Schools' income without sacrificing the bay's integrity. Preserving Keauhou Bay as it is, while focusing on infrastructure improvements, would ensure that this natural gem remains a sanctuary for local culture and recreation for decades to come.

## Ioana Petrisor

Dear County of Hawaii, Planning Department, This letter serves as comments to the Keauhou Bay Management Plan Draft EIS (the "Project"). As discussed below, I am an expert in environmental forensics and I have experience with the assessment of the impact of pollutants on bodies of water. As the Editor of the Environmental Forensics Journal, I have peer reviewed hundreds of articles, including those with studies related to impact of pollutants on bodies of water and sediments including in the marine environment. I have reviewed portions of the EIS and provide the following comment about additional studies and research that, in my opinion, are needed to assess the environmental impact of the Project on Keauhou Bay. My Background I am a biochemist with 30 years of experience including basic and applied research related to environmental contaminants focused on fate & transport evaluations. I have applied a variety of environmental forensic/fingerprinting methods to track the source and age-date environmental contaminants in water, soil, and air (including chlorinated solvents, PFAS, crude oil and petroleum products, metals, PCBs, perchlorate, nutrients, and 1,4-dioxane). I am the Editor-in-Chief of Environmental Forensics Journal and the author of the textbook "Environmental Forensics Fundamentals: A Practical Guide". Over the years, I have published over seventy scientific articles and an invention patent, and provided numerous presentations, workshops, and courses on environmental forensics. I am actively involved with Interstate Technology and Regulatory Council (ITRC). As a member of the ITRC's PFAS (per- and polyfluoroalkyl substances) team, I am currently actively contributing to several sections of the PFAS technical guideline document, including those on aqueous film forming foams (AFFFs), fate and transport and source evaluations. I have also conducted innovative research for U.S. DOE, U.S. DoD, and the European Community on environmental characterization, risk assessment, and innovative remedial technologies for soils, sediments, and water. A copy of my CV is attached. Comment Studies Are Needed to Assess The Environmental Impact of Additional Pollutants On Keauhou Bay The Project proposes to construct a 150-unit resort in an existing forested area, build a number of commercial kiosks, construct a cultural center and construct roughly 14,000 feet of retail/commercial space on and/or adjacent to Keauhou Bay. This also includes the construction of additional roads and a significant amount of hardscape. The project proposes to remove a large amount of existing historical forest area that may be capturing pollutants from the golf course and preventing them from entering the bay. The Project will likely increase the number of visitors and vehicles around the bay, which is likely to increase the quantity of pollutants that may enter the bay and effect flora and fauna within the bay. A study needs to be done to assess existing pollutant loading to the bay from the surrounding properties. This would likely include sampling any runoff to the bay, including from the golf course and runoff from the existing parking lots, as well as core sampling within the bay to assess the level of pollutants within the sediment and to evaluate the historical pollutant loading in the bay that are currently impacting flora and fauna (and water quality) within the bay. Note that while the EIS suggests that rainfall on the project site may percolate in the subsurface rather than running into the bay, it is my understanding (based on discussion with locals) that there is current flooding experienced on nearby Kamehameha III drive during rain events (with part of the flooding potentially originating from Project lands) and in the past rain events have washed out the 2 nd volleyball court that was located to the west of the remaining court. It appears that, at least at times, runoff does get into the bay and that should be considered. Moreover, locals have reported that the East end of the bay has gotten noticeably shallower in recent years, suggesting that sedimentation of the bay is occurring. Overall, there appears to be evidence that historical land

clearing in the area has led to increased runoff from the Project area. Moreover, the project proposes to remove 10+ acres of heavily forested land and replace it with roads, parking lots, buildings and other hardscape. That forested land receives runoff from the golf course area uphill of the forested area. One would expect forested area to slow down rainfall and reduce runoff the upper portions of the project area and golf course. As Kailua-Kona receives rainfall from periodic tropical storms and/or remnants of hurricanes where several inches of rain can fall within a couple of days, the project needs to study rainfall from large episodic events and the impact on the bay. In particular, with the forest gone and replaced by roads, parking lots, buildings and other hardscape, that water can no longer percolate and will be added runoff. None of this analysis was apparently conducted. An assessment should then include projections as to the amount of the potential increases in the quantity of pollutants entering the bay from the Project, assess potential mitigation measures and assess the ecological impact from the runoff. In conclusion, the EIS as written fails to include studies necessary to assess historical and ongoing impacts to the bay, future impacts to the bay from the Project, and potential mitigation measures to address historical issues caused by Proponents lands, if any, and future impacts from the proposed Project. Sincerely, Ioana G. Petrisor, Ph.D. Editor-in-Chief Environmental Forensics Journal  
Environmental.Forensics@gmail.com

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**From:** Ioana Petrisor <[REDACTED]>  
**Sent:** Friday, July 19, 2024 10:27 AM  
**To:** 221053-01 KS Keaouhou Entitlements  
**Cc:** Alex.Roy@hawaiicounty.gov  
**Subject:** Comments on Keaouhou Bay Management Plan EIS  
**Attachments:** Ioana G.Petrisor\_07-2024\_Gen.pdf

**Categories:** Yellow Category

To: County of Hawai'i, Planning Department  
Alex Roy, (808)961-8140, [Alex.Roy@hawaiicounty.gov](mailto:Alex.Roy@hawaiicounty.gov)  
Aupuni Center, 101 Pauahi St., Suite 3, Hilo, HI 96720

Dear County of Hawaii, Planning Department,

This letter serves as comments to the Keaouhou Bay Management Plan Draft EIS (the "Project"). As discussed below, I am an expert in environmental forensics and I have experience with the assessment of the impact of pollutants on bodies of water. As the Editor of the Environmental Forensics Journal, I have peer reviewed hundreds of articles, including those with studies related to impact of pollutants on bodies of water and sediments including in the marine environment. I have reviewed portions of the EIS and provide the following comment about additional studies and research that, in my opinion, are needed to assess the environmental impact of the Project on Keaouhou Bay.

#### My Background

I am a biochemist with 30 years of experience including basic and applied research related to environmental contaminants focused on fate & transport evaluations. I have applied a variety of environmental forensic/fingerprinting methods to track the source and age-date environmental contaminants in water, soil, and air (including chlorinated solvents, PFAS, crude oil and petroleum products, metals, PCBs, perchlorate, nutrients, and 1,4-dioxane). I am the Editor-in-Chief of Environmental Forensics Journal and the author of the textbook "Environmental Forensics Fundamentals: A Practical Guide". Over the years, I have published over seventy scientific articles and an invention patent, and provided numerous presentations, workshops, and courses on environmental forensics. I am actively involved with Interstate Technology and Regulatory Council (ITRC). As a member of the ITRC's PFAS (per- and polyfluoroalkyl substances) team, I am currently actively contributing to several sections of the PFAS technical guideline document, including those on aqueous film forming foams (AFFFs), fate and transport and source evaluations. I have also conducted innovative research for U.S. DOE, U.S. DoD, and the European Community on environmental characterization, risk assessment, and innovative remedial technologies for soils, sediments, and water. A copy of my CV is attached.

#### Comment

#### Studies Are Needed to Assess The Environmental Impact of Additional Pollutants On Keaouhou Bay

The Project proposes to construct a 150-unit resort in an existing forested area, build a number of commercial kiosks, construct a cultural center and construct roughly 14,000 feet of retail/commercial space on and/or adjacent to Keaouhou Bay. This also includes the construction of additional roads and a significant amount of



## IOANA G. PETRISOR, PHD

Senior Project Manager/Chief Chemist

Dr. Petrisor is a biochemist with 30 years of experience, helping both domestic and international clients recover costs in complex cases involving multiple contaminants and releases, playing a key role in strategy development and contaminant fate & transport evaluations. She has applied a variety of environmental forensic / fingerprinting methods to track the source and age-date environmental contaminants (including chlorinated solvents, PFAS, crude oil and petroleum products, metals, PCBs, perchlorate, nutrients, and 1,4-dioxane). Dr. Petrisor is the Editor-in-Chief of Environmental Forensics Journal and the author of the textbook "Environmental Forensics Fundamentals: A Practical Guide". She has also published over seventy scientific articles and an invention patent, and provided numerous presentations, workshops, and courses on environmental forensics. Dr. Petrisor is actively involved with Interstate Technology and Regulatory Council (ITRC). As a member of the ITRC's PFAS (per- and polyfluoroalkyl substances) team she is contributing to several sections of the PFAS technical guideline document, including those on aqueous film forming foams (AFFFs), fate and transport and source evaluations. Dr. Petrisor has conducted innovative research for U.S. DOE, U.S. DOD, and the European Community on environmental characterization, risk assessment, and innovative remedial technologies for soil, sediments, and water.

### SELECTED EXPERIENCE

**PFAS Investigations at Multiple Department of Defense (DoD) Sites / U.S. Department of the Navy (2021-present)**

Dr. Petrisor is evaluating PFAS sources at multiple DoD sites, including in South Carolina and New Jersey. She is using multiple lines of evidence, including historical document review, fate & transport evaluation, and chemical fingerprinting to identify and investigate potential release sources and delineate co-mingled groundwater plumes. Apart from the well-defined sources of PFAS, such as the aqueous film forming foams (AFFF) used for fire suppression, Dr. Petrisor has identified other, less publicized, PFAS sources with potential environmental impact, including munitions, weapon cleaning solutions, lubricants, demolition debris, waste handling, and on-site specific operations (e.g., metal plating, auto service). Additionally, she also investigates off-site potential sources and background levels in various environmental media. For a U.S. Navy site located in New Jersey this approach resulted in elimination of a series of on-site areas and the delineation of co-mingled plumes from both on-site and off-site sources. The described approach may be adapted to site specific conditions at other DoD and non-DoD sites.

**Preparation of a Guidebook for PFAS Management at Airports / Airport Cooperative Research Program (ACRP) (2021-present)**

Dr. Petrisor is part of a team that prepared a Guidebook aiming to assist airports with developing plans to manage PFAS exposure and risks at their facilities. Her specific contributions included: the review of ACRP Report 173 on the "Use and Potential Impacts of AFFF Containing PFAS at Airports" and preparation of a gap analysis; identification of non-AFFF sources of PFAS in airport settings and their potential impacts on daily operations and released PFAS; as well as PFAS source

### EDUCATION

PhD, Biochemistry/  
Environmental  
Biotechnology,  
Romanian Academy  
of Sciences, 2000  
BS, Chemistry/  
Technological  
Biochemistry,  
Bucharest  
University, 1992

### REGISTRATIONS & CERTIFICATIONS

UNESCO Training  
Certificate in Plant  
Molecular Genetics

40-hour Hazardous  
Waste Workers

### TRAINING

24-hour First  
Responders –  
Operations Level  
Health and Safety  
Training

### AFFILIATIONS/ ORGANIZATIONS

Editor-in-Chief of  
Environmental  
Forensics Journal  
Editorial Board  
Member for:

Soil & Sediment  
Contamination: An  
International Journal  
Journal of Residuals  
Science &  
Technology  
AEHS Foundation

hardscape. The project proposes to remove a large amount of existing historical forest area that may be capturing pollutants from the golf course and preventing them from entering the bay. The Project will likely increase the number of visitors and vehicles around the bay, which is likely to increase the quantity of pollutants that may enter the bay and effect flora and fauna within the bay. A study needs to be done to assess existing pollutant loading to the bay from the surrounding properties. This would likely include sampling any runoff to the bay, including from the golf course and runoff from the existing parking lots, as well as core sampling within the bay to assess the level of pollutants within the sediment and to evaluate the historical pollutant loading in the bay that are currently impacting flora and fauna (and water quality) within the bay. Note that while the EIS suggests that rainfall on the project site may percolate in the subsurface rather than running into the bay, it is my understanding (based on discussion with locals) that there is current flooding experienced on nearby Kamehameha III drive during rain events (with part of the flooding potentially originating from Project lands) and in the past rain events have washed out the 2<sup>nd</sup> volleyball court that was located to the west of the remaining court. It appears that, at least at times, runoff does get into the bay and that should be considered. Moreover, locals have reported that the East end of the bay has gotten noticeably shallower in recent years, suggesting that sedimentation of the bay is occurring. Overall, there appears to be evidence that historical land clearing in the area has led to increased runoff from the Project area. Moreover, the project proposes to remove 10+ acres of heavily forested land and replace it with roads, parking lots, buildings and other hardscape. That forested land receives runoff from the golf course area uphill of the forested area. One would expect forested area to slow down rainfall and reduce runoff the upper portions of the project area and golf course. As Kailua-Kona receives rainfall from periodic tropical storms and/or remnants of hurricanes where several inches of rain can fall within a couple of days, the project needs to study rainfall from large episodic events and the impact on the bay. In particular, with the forest gone and replaced by roads, parking lots, buildings and other hardscape, that water can no longer percolate and will be added runoff. None of this analysis was apparently conducted.

An assessment should then include projections as to the amount of the potential increases in the quantity of pollutants entering the bay from the Project, assess potential mitigation measures and assess the ecological impact from the runoff.

In conclusion, the EIS as written fails to include studies necessary to assess historical and ongoing impacts to the bay, future impacts to the bay from the Project, and potential mitigation measures to address historical issues caused by Proponents lands, if any, and future impacts from the proposed Project.

Sincerely,

**Ioana G. Petrisor, Ph.D.**

Editor-in-Chief

Environmental Forensics Journal

[Environmental.Forensics@gmail.com](mailto:Environmental.Forensics@gmail.com)

characterization and fate & transport evaluation. For this project, Dr. Petrisor completed two comprehensive Technical Memoranda on PFAS fate & transport and PFAS methods of investigation, with emphasis on state-of-art fingerprinting techniques (including comprehensive chemical analysis, total oxidizable precursors, total organic fluorine, and non-targeted analysis). Information from these Memoranda was included in the final draft Guidance document, which provides an in-depth understanding of airport operations and potential PFAS sources, along with specific regulatory requirements. This Guidebook sets the bases for successful PFAS investigations & remediation, as well as efficient PFAS management applicable to airports worldwide.

**\*Isotopic Study of Chlorinated Solvents in Subsurface of a Historical Landfill Site in Hollywood, California / Vulcan Materials Company (2018-2019)**

Dr. Petrisor has conducted forensic screening studies (using compound-specific isotopic analysis (CSIA)), to better understand subsurface contaminant fate & transport and to assess the possibility of off-site sources of PCE/TCE and 1,4-dioxane contributing to on-site subsurface contaminant plumes at a historical landfill site in Hollywood, California. The isotopic data were used in conjunction with quarterly monitoring and other site data helping to refine the conceptual site model (CSM) for this site. The isotopic data were also indicative of multiple releases and helpful in evaluating off-site contributions to the plume.

**\*Source Identification for Complex Groundwater Plume and Soil Contamination with Petroleum Hydrocarbons and Chlorinated Solvents, Los Angeles, CA / Angeles Chemical Company (2006-2010)**

Dr. Petrisor provided litigation support for a former chemical storage and re-packaging facility located in a heavily industrialized area of Los Angeles, California. Many organic chemicals were handled and stored, including a large variety of petroleum and non-petroleum solvents, as well as chlorinated solvents. The dispute involved a neighboring site with similar historical operations. In this context, she performed a thorough document review of company records, environmental databases, monitoring reports, more than 200 depositions, aerial photos, and maps, and conducted chemical fingerprinting and signature chemicals analysis based on monitoring data. As a result of all these, she identified a "signature" chemical associated with one site only. Its presence in subsurface of the client's site provided the physical proof that the other site was a contributing source. This finding correlated well with other lines of evidence used in the case. Based on various forensic lines of evidence, the case favorably settled for the client.

**\*Forensic Evaluation of a Groundwater Plume, New Jersey / Confidential Client (2010-2011)**

As a subject matter expert, Dr. Petrisor evaluated potentially contributing sources to a PCE/TCE/1,1,1-TCA/1,4-dioxane groundwater plume under active remediation at a former industrial site in New Jersey. The investigation was triggered when routine groundwater monitoring revealed the presence of a chemical that had never been used at the site. A comprehensive document review helped interpret historical groundwater data, and three neighboring sites were identified as potential contributors to the plume. Dr. Petrisor prepared a technical memorandum describing to the regulatory agency the existing evidence and the need for further environmental investigation by other PRPs.

**Subsurface PFAS Investigation Following an AFFF Spill at an Airport in Dallas, TX / Confidential Client (2023)**

An AFFF spill occurred in January 2023 at a hangar from an airport in Dallas, TX. The spill occurred on thick paved surfaces and spill response actions followed promptly. Dr. Petrisor has reviewed the PFAS sampling data and the associated Response Action Report providing comments and recommendations. PFAS fingerprinting was also conducted and proved useful in delineating the current spill from residual PFAS soil contamination from what appeared to be an older spill of a distinct AFFF type. The forensic evaluation on PFAS in soil denoted that the PFAS compounds left after excavation, still exceeding regulatory values, are not associated with the AFFF from the recent release. This investigation denoted the important role of fingerprinting evaluations in PFAS investigations since many historical spills of PFAS products were not investigated/delineated and could still contribute residual PFAS contamination in subsurface environments at many sites. That residual PFAS contamination may, in many cases, exceed the extremely low regulatory limits, triggering costly remedial

actions. Therefore, delineating a new release from residual and background PFAS in soils becomes critical at any sites with detected PFAS.

**Investigation of PFAS Sources in Groundwater Managed by a Municipality in Mid-Western US / Confidential Client (2022)**

Dr. Petrisor has led a forensic investigation related to the sources of PFAS in groundwater managed and discharged into a river by a Municipality located in mid-western US. Specifically, the goal was to establish if aqueous film forming foams (AFFFs) contributed to the PFAS detected in groundwater. Dr. Petrisor conducted PFAS fingerprinting, along with a comprehensive literature review related to PFAS fingerprints in legacy and modern AFFFs and in groundwater at sites impacted by AFFFs. Relevant literature on PFAS fingerprints in non-AFFF sources has also been consulted. Other independent lines of evidence were developed, including historical document review and PFAS fate & transport evaluation. Consequently, Dr. Petrisor prepared a Technical Memorandum synthesizing this investigation. This case study also resulted in the creation of a library of PFAS fingerprints in AFFFs and other sources, with general relevance to PFAS forensic investigations.

**\*Comprehensive Review of PFAS Sources and Fingerprinting Methods for Source Differentiation and Age-Dating / Environmental Forensics Journal (2019-2021)**

As Editor of Environmental Forensics Journal and member of the Interstate Technology Regulatory Council (ITRC) PFAS team, Dr. Petrisor has conducted a comprehensive literature review to evaluate available forensic techniques applicable to PFAS and advances in PFAS fingerprinting. The types and characteristics of PFAS sources were also investigated in the context of developing specific forensic techniques. Moreover, she has reviewed the advances and limitations of available sampling & analytical techniques applicable to PFAS, helping understand the implications for data evaluation and interpretation, with the final aim of building defensible lines of evidence. Dr. Petrisor already applies the gained knowledge in projects throughout the U.S.

**Forensic Evaluation of PCBs and other Contaminants in Sediments of a River in Northeastern U.S. / Confidential client (2023)**

On behalf of a confidential client that historically operated a steel manufacturing site located along a River in northeastern U.S., Dr. Petrisor reviewed expert reports related to cost allocation of PCBs and other contaminants in river sediments. The river sediments have been historically contaminated by many industrial properties located along the river. Dr. Petrisor has also forensically analyzed PCBs and other contaminant data (including heavy metals and PAHs) from the river sediments and from the client property. This ongoing evaluation is performed to propose a reliable cost allocation at this complex site with multiple potentially responsible parties (PRPs).

**\*Investigation of Nutrient Contamination in an Urban Lake, San Marcos, CA / Citizen Development Corporation (2013-2021)**

Dr. Petrisor provided expert services to investigate the sources of nutrients (i.e., N and P) and allocation of contributions to nutrients in lake water and sediment within a dynamic urban watershed in San Marcos, California. She has reviewed historical documents and conducted forensic sampling and testing of lake water and sediments, applying techniques of chemical fingerprinting, signature chemicals, and sediment age-dating. In preparation for litigation, she provided strategic advice in the context of mediation between the client (lake owner) and several public agencies. She also served as an appointed member of the technical team established to conduct investigations during the mediation proceedings and to regularly communicate the findings to the Regional Water Board. Dr. Petrisor participated in monthly meetings with the Regional Water Board representatives and has communicated to the Regional Water Board on behalf of the client, contributing to a path forward in this complex case, and resulting in the acceptance of the Remedial Investigation/Feasibility study and implementation of numerous field pilot tests.

**\*Age-Dating Heating Oil Releases in Soil of a Property in Anchorage, Alaska / Four Season LLC. (2018-2020)**

Dr. Petrisor was appointed expert witness for a heating oil contaminated property case in Anchorage, Alaska. She prepared an Expert Report focusing on age-dating heating oil releases in soil and evaluating the sources of the released heating oil. For this, she performed a detailed review of relevant environmental reports and historical documents, along with many oil chromatograms. Also, she has performed a comprehensive literature review on fate & transport of petroleum products in Alaska subsurface environment. Additionally, she prepared rebuttal comments related to an opposing expert report, as well as a Supplement to the Expert Report that had a key role in favorably settling the case.

**\*Deepwater Horizon Oil Spill Fingerprinting and Data Usability Evaluation for Litigation Support / British Petroleum (2011-2013)**

As part of a complex litigation support team of scientists, Dr. Petrisor conducted extensive fingerprinting studies related to this major oil spill in the U.S. This work included evaluation of n-alkanes and isoprenoids, PAHs, and various classes of biomarkers in sediments, water, and tarballs/oil sheens, using a large variety of forensic techniques. She has contributed to the development of innovative forensic approaches to differentiating closely related oils and conducted data QA/QC and data usability evaluations for numerous water and sediment samples.

**\*Source Identification of Petroleum Hydrocarbons in Soils at a Former Industrial Site, Lyon, France / Adams (2006)**

In another international case, Dr. Petrisor was commissioned by a French developer (through the client law firm) to conduct a forensic evaluation at an underground parking structure (848 spaces on seven floors) that was under construction at a former industrial area that was considered to be rehabilitated. The discovery of hydrocarbons and other contaminants in soils triggered a temporary halt to construction, followed by the forensic investigation to delineate the source for purposes of cost recovery. A forensic sampling plan was proposed, and a fingerprinting analysis was performed for selected soil samples. The relative concentrations and distributions of different classes of hydrocarbons and other compounds (such as dibenzothiophenes) were examined based on extracted-ion counts for different m/z values (SIM mode). Different diagnostic ratios were calculated. The investigation pointed out the presence, in all samples, of a main petroleum product consisting of a weathered (20 years or more) middle distillate that originated from a common source. This product was mixed with a hydraulic oil in some samples. A responsible party was identified as a historical service station operated by a major oil company. The results of the forensic analysis conducted by Dr. Petrisor were sufficient for the identified responsible party to offer to pay for the remediation costs before any legal action was initiated. The forensic investigation was completed within 3 weeks, at a cost of approximately \$7,000, and saved hundreds of thousands of dollars in remedial costs.

**\*Source Identification for Pb and As in an Urban Community Neighboring a Historical Pesticide Manufacturing and Storage Site in Watsonville, California / Confidential Client (2008-2010)**

Dr. Petrisor provided expert witness services for multiple-plaintiff cases in Watsonville, California. Investigated the sources of lead (Pb) and arsenic (As) in the community near a historical pesticide manufacturing site. She used several independent lines of evidence, including document review, fate-and-transport evaluation, chemical fingerprinting (e.g., correlation plots), and mineralogical fingerprinting. Based on all these, impacts from the historical pesticide manufacturing site in the neighboring community were established, in addition to other potential sources, and the case settled before trial.

**\*Investigation of the Source of PCBs in Soil near a Historical Power Plant at a Former U.S. Navy Base in Unalaska, Alaska / City of Unalaska (2009-2010)**

For this case, Dr. Petrisor provided expert services to the City of Unalaska, Alaska, related to investigating the source of PCBs in soil around a historical power plant that had been owned and operated by the city since the mid-1980s, but was built and initially operated during the Second World War as part of a military base (U.S.

Navy). The PCB contamination was initially discovered in sediments close to the plant, and a subsequent environmental assessment confirmed its presence in soils, before construction of a new power plant to meet increasing demand. Additionally, petroleum contamination (including middle distillates and bunker C) has been discovered throughout the area and is linked to storage and likely usage of petroleum products over the years. Several forensic lines of evidence were investigated, including historical document review and evaluation of various Navy practices, as well as evaluation of available PCB and other contaminant data on the City's property and throughout the former Navy base. The main finding related to the correlation between PCBs distribution patterns and historical Navy practices of using waste oil (including PCBs) on the bases to get rid of the dust. The results of this forensic investigation were presented in a mediation meeting and reached a positive resolution for the client that recovered all remedial costs from the Navy (about \$2.5 million), while avoiding costly litigation.

**\*Tree-Ring Fingerprinting Age-Dating and Source Identification of a Groundwater PCE Plume, Cambridge, Massachusetts / Confidential Client (2006-2007)**

Dr. Petrisor provided technical expertise, applying the dendroecology method, for a case of PCE groundwater contamination discovered while building a parking structure at the client's site in Cambridge, Massachusetts. The case was puzzling, as the only obvious source of PCE (a historical dry cleaner at a mall—upgraded) did not show any contamination at the time of sampling. However, tree-ring analyses of trees between the dry cleaner and the client's site revealed evidence of past releases. Specifically, multiple PCE releases were identified and age-dated to the year. The tree-ring data also allowed a reliable evaluation of plume size and past movement (using information from trees at increasing distance from the site). Dr. Petrisor contributed to a confidential report to the client for possible use in filing an insurance claim.

**\*Natural Attenuation Mechanisms Evaluation at Sites in Southern California / Confidential Clients (2008-2010)**

As a subject matter expert, Dr. Petrisor provided technical expertise to evaluate and confirm the occurrence of biodegradation and other natural attenuation mechanisms at several Los Angeles industrial sites contaminated with chlorinated solvents (PCE, TCE). General groundwater parameters, selected metals, and isotopic data were used as lines of evidence. Molecular diagnostic techniques (through biotrap sampling) were also deployed at selected locations. Results were correlated with geological and hydrological data. The isotopic results correlated well with the other natural attenuation parameters (dissolved oxygen, redox potential, sulfates, nitrates, pH, temperature, etc.), providing direct evidence of active degradation processes and supporting regulatory acceptance of a monitored natural attenuation remedy.

**\*Groundwater Evaluation of Natural Degradation Mechanisms of PCE, New Jersey / Confidential Client (2010-2011)**

As a subject matter expert, Dr. Petrisor evaluated various natural degradation mechanisms of PCE in groundwater at a former grocery store site in New Jersey. The site had no PCE degradation products and showed little evidence of reductive conditions. In this context, Dr. Petrisor identified aerobic biodegradation and potential abiotic degradation on iron minerals as possible degradation mechanisms at this site. She then developed specific recommendations for sampling and analyses to confirm that such degradation pathways were involved, apart from water parameters, and included specialty testing (of specific intermediate products), as well as isotopic and molecular diagnostic testing.

**U.S. DOE-Funded Research (USC) (2002-2003)**

**\*In-Situ Stabilization of Subsurface Contaminants (Metals and Radionuclides) Using Microbial Polymers. U.S.A.**

Dr. Petrisor managed a project funded by U.S. DOE and conducted at the University of Southern California, which involved experimental work performed by graduate students. The goal was to develop an innovative biotechnology for stabilizing a variety of heavy and radioactive metals in subsurface soils, based on the use of microbial polymers (biopolymers). Theoretical aspects of biopolymer interactions with metals in different porous media were studied initially, using published information. For practical aspects, the project focused on small-

arms firing ranges with soils contaminated by lead. Different soil treatments were screened through laboratory testing and column simulation experiments, with the aim of creating interpenetrating networks of biopolymers within the soil that would have the ability to entrap metal species inside the network. The in-situ production of biopolymers via the growth of microorganisms inside the soil was also investigated. In sum, this work demonstrated the ability to stabilize lead in firing-range soils to achieve non-concern levels. Subsequently, practical methods of treatment application were proposed.

**\*European Community-Funded Research (Romania, Greece) (1997-2000)**

Dr. Petrisor researched environmental characterization and assessment, and conducted laboratory, greenhouse, and field tests for bio- and phytoremediation deployments at mining sites in Romania and Greece. The project focused on three case studies of sites along the Black Sea Coast in Romania that were contaminated by heavy and radioactive metals (from mining activities). A thorough environmental characterization was performed, which produced an in depth understanding of environmental issues associated with a variety of heavy metals (including Pb, Cd, As, Zn, Mn, Ni) from mining, along with the fate and transport of such metals. The investigation then focused on laboratory studies of biosolubilization of metals from mine tailings (using rotary shakers and bioreactors) and biosorption of metals from contaminated water (column studies), as well as on laboratory, greenhouse, and field studies of phytostabilization (establishing vegetative covers) of tailing dumps. This work was conducted in the Laboratory of Metallurgy at the National Technical University of Athens, Greece. Aspects of this work are presented in Dr. Petrisor's Ph.D. thesis and multiple scientific publications.

**U.S. DOE/U.S. DOD-Funded Research (U.S. and Poland) (2007-2002)**

**\*Field-Scale Evaluation of Phytoremediation for Extraction of Pb from Contaminated Soil, Poland**  
Dr. Petrisor provided technical expertise and peer-review of data for a phytoremediation project. She conducted field analyses, deployed portable chlorophyll fluorometers to monitor metal uptake and plant health status, and peer-reviewed resulting data. The aim of the project was to create a link between the theory of phytoextraction established in lab and pilot-scale experiments, by applying phytoextraction at the field scale. In this context, Dr. Petrisor developed and field-tested advanced technologies for the application of amendments to contaminated soil, to support the process of lead and cadmium phytoextraction, resulting in a significant reduction of application costs and efficiency. This demonstration project covered all activities, from site characterization through final disposal of contaminated biomass, and addressed life-cycle costs based on both actual costs and anticipated "real-world" expenditures. The impact of amendments on soil microorganisms was also evaluated, and the technology developed was deployed in Poland in a large field application.

**\*Evaluation of Novel Mercury Remediation Technologies, Poland and U.S.A.**

Dr. Petrisor provided technical expertise and was involved in research regarding phytostabilization of mercury in soil. Soil contamination at a site in Poland was characterized, and bioremediation, phytoremediation, and chemical treatments were evaluated. Investigations focused on phytostabilization and/or chemical stabilization of the mercury in soils, as well as suitable techniques for mercury volatilization, capture, and recovery from contaminated soils. As a result, several practical approaches for remediation of mercury-contaminated soils were proposed.

**\*Production and Scale Implementation of Petroleum Contaminated Soils Bioreactor, Poland and U.S.A.**

In cooperation with the Westinghouse Savannah River Technology Center (SRTC), Dr. Petrisor was part of a research team that investigated the removal of low-level organic contaminants from petroleum-contaminated soils by using a mobile bioreactor. The work focused on the design, construction, and operation of a continuous-airflow, packed-bed reactor designed to accept both contaminated water and soil. The bioventing process was used to remediate contaminated soils amended with wood chips and fertilizers. Investigations of bioaugmentation were also carried out. The outcome was the design of a mobile bioreactor.

**\*Production and Scale-Implementation of Chlorinated Solvent Bioreactor, Poland and U.S.A.**

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I. G. Petrisor Resume Page | 6

Dr. Petrisor conducted feasibility studies, and biodegradation tests for remediation of soils contaminated with chlorinated solvents in a mobile bioreactor, which could work in both aerobic and anaerobic conditions. A hybrid anaerobic and aerobic biodegradation mechanism was considered. The study emphasized the use of bioaugmentation to increase overall process efficiency.

**\*Monitored Natural Attenuation at a Biopile Site from an Oil Refinery in Southern Poland**

Dr. Petrisor provided technical expertise and peer-review of publications for a project to compare long- and short-term natural attenuation, as well as active and passive aeration systems, at an engineered biopile. The work included periodic sampling and biochemical and microbiological characterization of hydrocarbon-degrading acidophilic microorganisms.

**\*Research at Institute of Biology of the Romanian Academy of Sciences (ICEBIOL) (1993-2000)**

**Bioremediation of Environments Contaminated with Petroleum Wastes, Romania.** As part of a research team of scientists, Dr. Petrisor participated in several projects with the aim of isolating, identifying, and characterizing microbial communities that are present at petroleum-contaminated sites and have the ability to degrade hydrocarbons. Additional laboratory and field studies successfully bioremediated petroleum-contaminated soils using inoculation with such microbial isolates (bioaugmentation) and/or stimulation of indigenous microbiota through special treatments (biostimulation). Bioventing was also tested.

**\*Biosynthesis and Purification of Microbial Products of Biotechnological Interest, Romania.**

As part of a research team of scientists, Dr. Petrisor was involved in a series of projects to identify and obtain microbial products with potential use in bioremediation. Biopolymers obtained from strains of *Xanthomonas sp.* and *Pseudomonas sp.* proved useful in removing metallic ions from water when used as biosorbent filters. Also, semi-purified biosurfactants from *Pseudomonas sp.*, *Coryne-bacterium sp.* and *Bacillus sp.* were used efficiently in soil pre-treatments.

**\*Means to Increase Hydrocarbon Bioavailability in Soils, Romania.**

The aim of several projects at ICEBIOL was to find innovative treatments for bioremediation of petroleum-contaminated soils. Semi-purified biosurfactant products or other microbial products, as well as inoculation with biosurfactant-producing bacterial strains were studied for pre-treatment of contaminated soils. The best results were provided by the treatments with whole-culture broth.

**\*Adsorption/Biosorption of Heavy Metals from Mine Effluents, Romania.**

Dr. Petrisor was a member of the scientific team for several projects to assess the efficiency of using adsorbent/biosorbent materials, with or without immobilized bacterial cells, in the removal of heavy metals from contaminated waters. Studies conducted in lab columns identified several adsorbent and biosorbent materials (inert biomass) to be used in practical applications.

**\*Biosolubilization of Heavy Metals from Mine Tailings, Romania.**

Dr. Petrisor was a member of the scientific team investigating the efficiency of biosolubilization in removal, with possible recovery of heavy metals from polymetallic, copper, and phosphate mine tailings. Experiments were carried out in rotary shakers and bioreactors and identified the best microbial treatments for biosolubilization purposes.

**UNESCO Funded Research (1999)**

**\*Gene Expression in a Transgenic Line of Lotus japonicas, University of Queensland, Brisbane, Australia.**  
Under a short-term UNESCO research grant, Dr. Petrisor conducted research in plant molecular genetics, working in the Department of Botany at the University of Queensland, Brisbane, Australia. The project studied gene expression in a transgenic line of *Lotus japonicas*; to identify plant genes involved (essential) in modulation in legumes. The work focused on plant growth and gene expression in the presence of several hormones, different pH levels, and varying light/dark conditions, as well as other factors that influence growth.

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I. G. Petrisor Resume Page | 7

## PUBLICATIONS

### Book

**Petrisor IG.** 2014. *Environmental Forensics Fundamentals: A Practical Guide*. CRC Press, Taylor & Francis Group, Boca Raton, London, New York, 395 pages.

### Book Chapters

Knox AS, **Petrisor IG**, Turick CE, Roberts J, Paller MH, Reible D, Forrest CR. 2010. Life Span of Biopolymer Sequestering Agents for Contaminant Removal and Erosion Resistance. In: *Biopolymers* (Ed. By M. Elashar), INTECH, ISBN 978-953-307-109-1, DOI: 10.5772/10259.

**Petrisor IG**, Wells J. 2008. Tracking Chlorinated Solvents in the Environment. In: *Issues in Environmental Science and Technology*, Vol. 26: Environmental Forensics. Ed. by R.E. Hester and R.M. Harrison, RSC Publishing, Royal Society of Chemistry, 130-152.

**Petrisor IG**, Wells J. 2008. Perchlorate – Is Nature the Main Manufacturer? In: *Issues in Environmental Science and Technology*, Vol. 26: Environmental Forensics. Ed. by R.E. Hester and R.M. Harrison, RSC Publishing, Royal Society of Chemistry, 105-129.

Balouet JC, Oudijk G, **Petrisor IG**, Morrison R. 2007. Emerging Forensic Techniques. In: *Introduction to Environmental Forensics*, Second Edition, Eds. Brian L. Murphy and Robert D. Morrison, Elsevier, 699-731.

**Petrisor IG**, Parkinson RA, Horswell J, Waters JM, Burgoyne LA, Catchside DEA, Dejonghe W, Leys N, Vanbroekhoven K, Pattnaik P, Graves D. 2005. Microbial Forensics. In: *Environmental Forensics – Contaminants Specific Approaches*, Eds. R.D. Morrison and B.L. Murphy, Elsevier, 227-257.

### Invention Patent

Ionescu AD, Paraschiv M, Jurcoane S, **Petrisor IG**, Scurci H, Luca E. 2000. Procedure for Biosynthesis of Glucosylase from a Selected Strain of *Aspergillus awamori*. Invention Patent No. 116208 B, from 11/2000, issued by The State Office for Invention, Bucharest, Romania, 3p.

### Peer-Reviewed Articles

Hadley P, **Petrisor IG**. 2013. Incremental sampling: Challenges and opportunities for environmental forensics. *Environmental Forensics* 14(2):109-120.

Katyal A, **Petrisor IG**. 2012. Innovative sustainable drought management strategy incorporating forensic techniques and policy framework. *Environmental Forensics* 13(2):122-139

Katyal A, **Petrisor IG**. 2011. Flood management strategies for a holistic sustainable development. *Environmental Forensics* 12(3):206-218.

**Petrisor IG**, Kanner A. 2010. Chinese drywall — Environmental forensic opportunities. *Environmental Forensics* 11(1-2):6-16.

Bica I, Alboiu IN, Iancu I, Dimache A, Stefanescu M, Voicu A, Lazaroate M, Cirstea D, Onutu IA, **Petrisor IG**. 2009. Innovative forensic assessment and remediation strategies for polluted aquifers. *Environmental Forensics* 10(3):214-228.

Balouet J-C, Oudijk G, Smith K, **Petrisor IG**, Grudd H, Stocklassa B. 2007. Applied dendroecology and environmental forensics. Characterizing and age dating environmental releases: Fundamentals and case studies. *Environmental Forensics* 8(1):1-17.

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I. G. Petrisor Resume Page | 8

**Petrisor IG**, Lazar I. 2006. Emerging contaminants — The problem, examples and bioremediation alternatives. *Part I. Roumanian Biotechnol Lett* 11(3):2693-2701.

**Petrisor IG**, Lazar I. 2006. Emerging contaminants — The problem, examples and bioremediation alternatives. *Part II. Roumanian Biotechnol Lett* 11(4):2781-2790.

Kim D, **Petrisor IG**, Yen TF. 2005. Evaluation of biopolymer-modified concrete systems for disposal of cathode ray tube glass. *J Air Waste Manage Assoc* 55:961-969.

Lazar I, Voicu A, Dobrota S, Stefanescu M, **Petrisor IG**, Cismasiu C. 2005. New contributions to the microbiota naturally occurring in the Movile Cave. *Travaux de L'Institut de Speologie Emil Racovita*, Tomes XLIII-XLIV:17-34.

Wan M-W, **Petrisor IG**, Lai H-T, Kim D, Yen TF. 2004. Copper adsorption through chitosan immobilized on sand to demonstrate the feasibility for in situ soil decontamination. *Carbohydrates Polymers* 55:249-254.

Kim D, **Petrisor IG**, Yen TF. 2004. Geopolymerization of biopolymers: a preliminary inquiry. *Carbohydrate Polymers* 56:213-217.

Khachatoorian R, **Petrisor IG**, Yen TF. 2004. Prediction of plugging effect of biopolymers using their glass transition temperatures. *J Petrol Sci Engin* 41:243-251.

**Petrisor IG**, Dobrota S, Komnitsas K, Lazar I, Kuperberg JM, Serban M. 2004. Artificial inoculation — Perspectives in tailings phytostabilization. *Int J Phytoremed* 6(1):1-15.

**Petrisor IG**, Morrison R. 2004. Emerging contaminants affecting water quality. *Western Water Law & Policy Reporter* 8(12):315-322.

**Petrisor IG**, Morrison R. 2004. Emerging contaminants — Part II. *Environ Liabil Enforc Penalties Reporter* 14(12):287-292.

Healey S, **Petrisor IG**, Morrison R. 2004. Vapor intrusion — Forensic approaches and recent developments. *Environ Claims J* 16(3-4):237-248.

Khachatoorian R, **Petrisor IG**, Kwan C-C, Yen TF. 2003. Biopolymers plugging effect: Laboratory pressurized pumping flow studies. *J Petrol Sci Engin* 38:13-21.

Etemadi O, **Petrisor IG**, Kim D, Wan M-W, Yen TF. 2003. Stabilization of metals in subsurface by biopolymers: Laboratory drainage flow studies. *Soil Sed Contam: An Int J* 12(5):647-661.

**Petrisor IG**, Komnitsas K, Lazar I, Voicu A, Dobrota S, Stefanescu M. 2002. Biosorption of heavy metals from leachates generated at mine waste disposal sites. *The European Journal of Mineral Processing and Environmental Protection - Biotreatment and Biosorption I – Special Issue*, 2(3):158-167.

Komnitsas K, **Petrisor IG**. 2001. Environmental characterization and risk assessment of Somova waste dumps. *Mineral Wealth* 118:53-60.

**Petrisor IG**, Dobrota S, Lazar I, Voicu A, Stefanescu M, Kuperberg M. 2001. Bioremediation of soils contaminated with oily sludge: A Romanian field study. *AEHS Contam Soil Sed Water August International Issue*:48-50.

**Petrisor IG**, Komnitsas K, Lazar I, Serban M. 1999. Environmental characterization and risk assessment of Somova case study. *Biotechnologies — Scientific Papers of Univ. of Agronomical Studies and Veterinary Medicine*, Bucharest, Seria F, IV:145-154.

Voicu A, **Petrisor IG**, Lazar I. 1999. The stability of Xanthan biopolymer in the limits of some physico-chemical parameters: Its biodegradability and protection using biocides. *Biotechnologies — Scientific Papers of Univ. of Agronomical Studies and Veterinary Medicine*, Bucharest, Seria F, Vol. IV:119-130.

Lazar I, Dobrota S, Voicu A, Stefanescu M, Sandulescu L, **Petrisor IG**. 1999. Microbial degradation of waste hydrocarbons in oily sludge from some Romanian oil fields. *J Petrol Sci Engin* 22:151-160.

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I. G. Petrisor Resume Page | 9

- Lazar I, Voicu A, Nicolescu D, Mucenica D, Dobrota S, **Petrisor IG**, Stefanescu M, Sandulescu L. 1999. The use of naturally occurring selectively isolated bacteria for inhibiting paraffin deposition. *J Petrol Sci Engin* 22:161–169.
- Komititsas K, Lazar I, **Petrisor IG**. 1999. Application of a vegetative cover on phosphogypsum stacks. *Minerals Engin* 12(2):175–185.
- Lazar I, Mucenica D, Dobrota S, Voicu A, Sandulescu L, Stefanescu M, **Petrisor IG**. 1998. Characteristics of the microbial communities occurring in oily sludges from petroleum industry. *Mineral Process Extract Metallurg Rev* 19:395–407.

### Editorials in the Environmental Forensics Journal

- Petrisor IG**. 2012. Emerging environmental forensics applications and case studies: Review of Environmental Forensics Proceedings of the 2011 INEF Conference. 13(4):285–288.
- Petrisor IG**, Lazar I. 2008. Sustainability: Perspectives and opportunities. 9(4):277–282.
- Petrisor IG**, Westerfield W III. 2008. Hot environmental and legal topics: Greenhouse gas regulation and global warming. 9(1):1–5.
- Petrisor IG**. 2007. Background in environmental forensics: "Raising the awareness." 8(3):195–198.
- Petrisor IG**. 2006. Mercury — Hazards and forensic perspectives. Letter from the Managing Editor. 7(4):289–292.
- Petrisor IG**. 2006. Use of oxygenates to date a gasoline release. Letter from the Managing Editor. 7(2):103–104.
- Petrisor IG**. 2006. Focus on perchlorate. 7(1):1–3.
- Petrisor IG**. 2005. A step forward into developing forensic standards — The new ASTM Sub-Committee on Forensic Environmental Investigations. 6(4):319–320.
- Petrisor IG**. 2005. INTERSOL 2005 conference. 6(3):217–218.
- Petrisor IG**. 2005. Fingerprinting in environmental forensics. 6(2):101–102.
- Petrisor IG**. 2005. Sampling and analyses — Key steps of a forensic investigation. 6(1):1.
- Petrisor IG**, Kitts C. 2004. Advances in forensic microbiology. 5(2):59–60.
- Morrison R, **Petrisor IG**. 2004. Promoting environmental forensics through ISEF workshops. 5(1):1–2.

### Technical Guidelines

- ITRC. 2024. PFAS Technical and Regulatory Guidance Document. Final Document to be published in 2023.
- ITRC. 2021. 1,4-Dioxane Technical and Regulatory Guidance Document. Published in Feb. 2021.
- ITRC. 2011. Environmental Molecular Diagnostic Fact Sheets. Technical Overview.
- ITRC. 2005. Environmental Management at Operating Outdoor Small Arms Firing Ranges.
- ITRC. 2005. Characterization, Design, Construction, and Monitoring of Mitigation Wetlands.

### Selected Presentations and Courses/Webinars

- Petrisor IG**. 2024. A Primer on Per- and Polyfluoroalkyl Substances (PFAS) – Building Reliable Scientific Evidence. Platform presentation - part of an opening panel discussion at American Bar Association (ABA) 2024 Toxic Tort and Environmental Law Conference, Scottsdale, AZ, April 11–13, 2024.
- Petrisor IG**. 2024. Chemical Fingerprints of Per- and Polyfluoroalkyl Substances (PFAS) in Environmental Media Vs. Source Materials. Platform presentation in Environmental Forensics Session, AEHS Conference, San Diego, CA, March 20, 2024.
- Petrisor IG**. 2023. PFAS Source Tracking - Solutions and Limitations – part of the American Bar Association (ABA) on-line Webinar on PFAS Impacts on Water Utilities, October 26, 2023.
- Petrisor IG**. 2023. A Primer on Per- and Polyfluoroalkyl Substances (PFAS) – PFAS Tracking and Expert Issues. Platform presentation - part of an opening panel discussion at American Bar Association (ABA) 2024 Toxic Tort and Environmental Law Conference, Scottsdale, AZ, April 21–22, 2023.
- Petrisor IG**. 2023. Chemical Fingerprints of Per- and Polyfluoroalkyl Substances (PFAS) in Source Materials. Platform presentation in Environmental Forensics Session, AEHS Conference, San Diego, CA, March 22, 2023.
- Petrisor IG**. 2022. Challenges and Advances in Per- and Polyfluoroalkyl Substances (PFAS) Fingerprinting. Platform presentation in Environmental Forensics Session, AEHS Conference (Virtual and Recorded Conference), San Diego, CA, March 17, 2022.
- Petrisor IG**. 2021. 1,4-Dioxane – An Environmental Forensic Perspective: Platform presentation in Environmental Forensics Session, AEHS Conference (Virtual and Recorded Conference), San Diego, CA, March 25, 2021.
- Petrisor IG**. 2019. Environmental Forensics Techniques – Principles & Applications. 2-Part On-Line Course via Midwest Geosciences Group. live presentations scheduled for November 7 and 14, 2019.
- Petrisor IG**. 2019. Source Evaluation for Per- and Polyfluoroalkyl Substances (PFAS). Platform presentation in Environmental Forensics Session, AEHS Conference, San Diego, CA, March 19, 2019.
- Petrisor IG**. 2019. Environmental Forensics: Strategic Approaches for Litigation Support, Site Characterization & Remediation. Workshop presentation (Workshop 1 — Environmental Forensics: Challenges & Solutions), AEHS Conference, San Diego, CA, March 18, 2019.
- Petrisor IG**. 2018. Introduction to Environmental Forensics: Fingerprinting Techniques in Support of Environmental Litigation, Investigations, and Remediation. Invited talk at SAM Fall Meeting, San Diego, CA, October 30, 2018.
- Petrisor IG**. 2018. Fingerprinting Methods for Source Identification, Age-Dating and Improved Remediation Accuracy. 5-Part On-Line Course via Midwest Geosciences Group. live presentations on March 29 and 30, April 19, 20 and 24, 2018.
- Petrisor IG**. 2018. Tracking Chlorinated Solvents in the Environment. Invited talk at Battelle Conference on Chlorinated and Recalcitrant Compounds in Environmental Forensics Session, Palm Springs, CA, April 11, 2018.

- Petrisor IG.** 2018. Environmental Forensics: Strategic Approaches for Litigation Support and Site Remediation. Workshop presentation (Workshop 1 — Environmental Forensics: Challenges & Solutions), AEHS Conference, San Diego, CA, March 19, 2018.
- Petrisor IG.** 2017. Emerging environmental forensics approaches and applications. Workshop presentation (Workshop 7 — Environmental Forensics Challenges & Solutions), AEHS Conference, San Diego, CA, March 21, 2017.
- Crowder R. **Petrisor IG.** 2017. Use of fingerprinting techniques to identify "mystery" oil spills and determine contamination claim validity. Platform presentation in Environmental Forensics Session, AEHS Conference, San Diego, CA, March 21, 2017.
- Petrisor IG.** 2016. Environmental forensics: Emerging techniques for complex challenges. Workshop presentation (Workshop 9 — Environmental Forensics Challenges & Solutions), AEHS Conference, San Diego, CA, March 22, 2016.
- Petrisor IG.** 2015. Tracking oil spills and defective products. Invited luncheon speech at SDEP Lunch Meeting, November 10, 2015.
- Petrisor IG.** 2015. Environmental forensics techniques — Principles and applications in litigation and site remediation. 2-Day In-Class Course provided through NWETC, Long Beach, CA, November 5-6, 2015.
- Petrisor IG.** 2015. Innovative approaches in environmental forensics. Webinar presentation to Kinder Morgan, July 23, 2015.
- Petrisor IG.** 2015. Fingerprinting methods for "CSI" investigations of spilled oil. Invited keynote speech at 2015 Used Oil/HHW Training & Conference: "The Reduced, The Reused, and the Recycle," Universal City, CA, April 8, 2015.
- Petrisor IG.** 2015. Emerging environmental forensics approaches and applications. Workshop presentation (Workshop 4 — Classic & Emerging Environmental Forensics Techniques and Applications), AEHS Conference, San Diego, CA, March 23, 2015.
- Petrisor IG.** 2013. Environmental forensics techniques. 2-Day in-class course provided through NWETC, Sacramento, CA, November 6-7, 2014.
- Petrisor IG.** 2014. Tracking oil spills. Invited speech at "Our Coast to Keep: Environmental Law Enforcement in Southern California Seminar," Whittier Law School, Orange County, CA, September 5, 2014.
- Petrisor IG.** 2014. Tracking oil spills. On-line webinar provided through Midwest Geosciences, July 17, 2014.
- Petrisor IG.** 2014. Tracking chlorinated solvents. On-line webinar provided through Midwest Geosciences, June 27, 2014.
- Petrisor IG.** 2014. Cutting-edge techniques in environmental forensics. Platform presentation in Environmental Forensics Session, AEHS Conference, San Diego, CA, March 18, 2014.
- Petrisor IG.** 2014. Emerging environmental forensics techniques and applications. Workshop presentation (Workshop 7 — Classic & Emerging Environmental Forensics Techniques and Applications), AEHS Conference, San Diego, CA, March 18, 2014.

- Petrisor IG.** 2013. Environmental forensics techniques. 2-Day In-Class Course provided through NWETC, Long Beach, CA, November 14-15, 2013.
- Petrisor IG.** 2013. Innovative approaches in environmental forensics: Petroleum applications. Platform presentation in Environmental Forensics Session, AEHS Conference, San Diego, CA, March 19, 2014.
- Petrisor IG.** 2013. Emerging environmental forensics techniques and applications. Workshop presentation (Workshop 3 — Classic & Emerging Environmental Forensics Techniques and Applications), AEHS Conference, San Diego, CA, March 18, 2013.
- Petrisor IG.** 2012. Introduction to environmental forensics. Invited Seminar to Nashua Community College, November 8, 2012, via WebEx.
- Petrisor IG.** 2012. Innovative approaches in environmental forensics. Invited speech to Chevron "Lunch & Learn," San Ramon, CA, June 28, 2012.
- Petrisor IG.** 2012. Forensic investigation at a historical foundry site in France. Platform presentation in Environmental Forensics Session, AEHS Conference, San Diego, CA, March 21, 2012.
- Petrisor IG.** 2012. "Emerging" environmental forensics. Workshop presentation (Workshop 3 — Classic & Emerging Environmental Forensics Techniques and Applications), AEHS Conference, San Diego, CA, March 19, 2012.
- Petrisor IG.** 2012. Environmental forensics — Environmental crime scene investigations. 12-Week on-line course provided through AEHS Foundation, February 6 – April 27, 2012.
- Petrisor IG.** 2011. Environmental forensics – Environmental crime scene investigations. 12-Week on-Line course provided through AEHS Foundation, September 12 – December 9, 2011.
- Petrisor IG.** 2011. Fingerprinting techniques. Invited speech at Detection of Environmental Crimes Conference, New York, NY, October 27, 2011.
- Petrisor IG.** 2011. Sustainable environmental characterization through tree-ring fingerprinting. Invited speech at Battelle International Symposium on Bioremediation and Sustainable Environmental Technologies, D4 Session on Detection Methods for Emerging Contaminants, Reno, NV, June 29, 2011.
- Petrisor IG.** 2011. Contaminant source tracking and age-dating. 2-Day in-class course provided through NWETC, San Diego, CA, February 28-March 1, 2011.
- Petrisor IG.** 2010. Classic & emerging environmental forensics techniques. Invited lecture at Hung-Kuang University, Taichung, Taiwan, September 21, 2010.
- Petrisor IG.** 2010. Scientific and technical paper writing. Invited lecture at Hung-Kuang University, Taichung, Taiwan, September 23, 2010.
- Razafindratandra Y. **Petrisor IG.** 2010. Environmental forensics: The search and role of scientific evidence. Platform presentation at INTERSOL Conference, Paris, France, March 2010.
- Petrisor IG.** 2008. Classic & emerging environmental forensics techniques and case studies. Invited keynote speaker opening the Environmental Crimes Investigation Conference, Porto Alegre, Brazil, 15 April 2008.



**Petrisor IG.** 2005. Environmental forensics: Focus on perchlorate. Workshop Presentation at ISEF Meeting, Santa Fe, NM, Sept 21-22, 2005.

**Petrisor IG.** 2005. Environmental forensics: Focus on emerging contaminants. Workshop Presentation at ISEF Meeting, Virginia Beach, VA, June 7-8, 2005.

**Petrisor IG.** 2004. Technical issues regarding source identification & remediation. Invited speech at Mealey's MTBE & USTs Litigation Conference, New York, NY, December 6, 2004.

## John Phillips

As a resident and home owner here in Kailua Kona I often paddle in Keauhou Bay. I believe your proposed development there will pollute the bay and destroy it for generations to come. I urge you to stop this development!

**James Plant**

Dear KS Management,

In regards to your proposed development at Keauhou Bay, I would like to see much more detail on how the additional waste water, sewage and run-off is going to be managed. The bay is very fragile and it seems that a responsible and caring land owner would do everything possible to keep from damaging such a beautiful and special place. I do not believe your environmental impact study goes far enough in addressing these issues. It appears to be only the bare minimum, and that feels very wrong from a company that is supposed to hold Hawaiian environmental sensibilities.

Sincerely,

James Plant  
Kailua-Kona

**From:** Jo Quinn  
**Sent:** Tuesday, July 23, 2024 10:37 AM  
**To:** 221053-01 KS Keauhou Entitlements  
**Subject:** Proposed Keauhou Bay Development

**Categories:** Green Category

**DO NOT RUIN THIS BEAUTIFUL BAY!**

Please, **DO NOT** risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have **ALWAYS** polluted the water in EVERY coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keauhou Bay is their habitat and this development **WILL** be **CHANGING** an Entire Ecosystem.

**ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT**

In the Endangered Species Act of 1973 Under Section 2 (b). "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keauhou Bay.

The Green Sea Turtle swims in Keauhou Bay weekly and the monk seal has also been seen swimming and resting in Keauhou Bay. Both of these marine animals are on the endangered species list.

Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

#### FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED

The green sea turtle is federally protected and can be seen in Keauhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Allowing this development WILL POLLUTE Keauhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keauhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawaii are protected by the Endangered Species Act (ESA) and additionally protected by Hawaii's Revised Statutes Chapter 195D (HRS) and Hawaii's Administrative Rules (HAR) 13-124."

This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

#### THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keauhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keauhou Bay will likely be changed forever.

This information is from a NOAA Scientist; "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keauhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keauhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keaouhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keaouhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keaouhou Bay and the surrounding area during the building phase of this enormous project.

#### GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keaouhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "

Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are

no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keaouhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keaouhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where the Hawai'i government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keaouhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keaouhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keaouhou Bay.

#### ALGAE BLOOMS KILL CORAL AND MARINE LIFE

The trees that are slated to be cleared for the development further protect Keaouhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution... " <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keahou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAHOUBAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keahou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

FURTHERMORE: "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keahou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keahou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keahou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2022/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20says%20a%20new>

The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershepherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

#### NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

#### How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats."

<https://oceanservice.noaa.gov/facts/ocean-noise.html>

#### LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or

local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

#### MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawai'i. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide..."

This was the third major bleaching episode in Hawai'i over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-

off." <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,had%20catastrophic%20impacts%20state%20wide.>

This article is by the Coral Reef Alliance here in Hawai'i. "An ecosystem under threat Hawai'i's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawaii%CA%BBi's%20reefs%20face%20major%20global,into%20Hawaii%CA%BBi's%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawai'i." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawai'i has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris."

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures,

pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-*a* concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain"

This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3-6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3-6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area,

the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

#### HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%20C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,would%20C%20a%20new%20study%20said.>

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shoes, that

more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation" [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhahJhijAnWAq453RgN0jAjwEl9jnR3ZotY0PyGzA5Ic\\_H001zCHNIP3ASnhcgKKry6\\_vKLPw49dbmBYoxSg3YIMgQIGBZsapdGUH70ISLbu9X5Pr3xED4Kxl470sflvgQ1a72ZrT3rUbraxpodId2A0NISmWSuxB7HjEDdpj80Gjpx71TJWdCfXvFKIIZYeNdcj3Sw\\_dnatUg5IZhlcjPBDImmaH15yqT5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhahJhijAnWAq453RgN0jAjwEl9jnR3ZotY0PyGzA5Ic_H001zCHNIP3ASnhcgKKry6_vKLPw49dbmBYoxSg3YIMgQIGBZsapdGUH70ISLbu9X5Pr3xED4Kxl470sflvgQ1a72ZrT3rUbraxpodId2A0NISmWSuxB7HjEDdpj80Gjpx71TJWdCfXvFKIIZYeNdcj3Sw_dnatUg5IZhlcjPBDImmaH15yqT5Q%3D&tracking_referrer=abcnews.go.com)

#### INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste each year." <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keaunoh Bay. On Hawaii Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawaii'i landfill

September 17, 2023

The West Hawaii'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawaii'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

A County commission drafts ordinance aiming to ban recyclables at West Hawaii'i landfill  
By Megan Moseley September 6, 2023

Hawaii'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawaii'i County Director of Environmental Management, told commissioners the West Hawaii'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green

waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

Drought Conditions On Hawai'i Island Prompt Water Supply Message

by Big Island Video News  
on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information from the U.S. Drought Monitor. There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawaii%CA%BBi-island-prompt-water-supply-message/>

U.S.

Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to significant droughts, and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the world's largest surfing wave pool opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. " ... We are on the verge of a greater catastrophe."

"We are in a water crisis, that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawai'i, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

UPDATE: HELCO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity use is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

Big power supply problems continue to plague Hawaii Island

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island  
<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

#### FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES

A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawai'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state. This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: All of these roads only have two lanes!

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr.  
<https://www.youtube.com/watch?v=-FQSnPDji8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii's Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

**MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC and WASTEWATER:**

1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff | January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) "The overwhelming plastic waste Hawaii visitors leave behind By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips."

<https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawai'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawai'i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai%CA%BBi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealahoe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawai'i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawai'i Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs, Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawai'i State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) HELCO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output "Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawai'i's water supply Hawai'i Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawai'i Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawai'i's power system from its water system, said Kawika Uyehara, deputy director of Hawai'i County's Department of Water

Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-serve-water-amid-power-outages>

16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) News Hawai'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawai'i Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai%CA%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiaianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?t=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/?t=52660)

20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

HISTORICAL AND CULTURAL SIGNIFICANCE:

The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, the law is part of Hawai'i's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

The Law of the Splintered Paddle is also on Kamehameha Schools' website. The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.

## IN CONCLUSION

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that adding another development is going to cause devastating, lasting, effects on the Eco-system at Keauhou Bay.

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other.

In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace

of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels.

The trees that currently stand on the land that is threatened to be developed clearly protect the marine life and environment from further damage. The location is not suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen.

Please save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort!

Mahalo,

Jo Quinn

## Sally Rankin

My husband and I made the difficult decision to move away from Keauhou Bay in 2022, after several years of voicing our concern over the development plan put forth by Kamehameha Schools and the detrimental effect it would have on our quality of life with increased traffic just feet from our home.

Over the last decade we have consistently heard from others: past neighbors, environmentalist and scientist studying the long term effects of development at Keauhou Bay being concerned about the quality of water. Currently affected by the existing roadways, the golf course, cesspools and extractive tourism, we believe that this concern has not been adequately addressed.

This development plan is misguided and has not sufficiently taken in account the current residential neighborhood or the negative effects on such a small bay that is easily subject to further degradation.

While the zoning and laws may allow Kamehameha Schools to proceed with this project, should there not be respect for an area full of sacred and culturally significant sites that need to be protected. Do we not look back and learn from past mistakes, as we watch the rebuilding and restoration at Kahala'u within the same corridor, at the cost of millions of dollars, because of a decision just like this one, building more hotels, when really preservation should be most important.

## Comments on Impact of Proposed Keauhou Bay Management Plan: Alice Ray

I appreciate the thorough review of public policy documents, clarity and transparency about goals in the KS Strategic Map for 2025, and good faith efforts to make community input an important part of the planning process. However, this plan fails on many levels. My focus here is the lack of consideration potentially superior alternatives for use of the *mauka* plot planned for a high end hotel. Many alternatives align better with the 2025 KS Strategic Map to “develop resilient economies, cultural landscapes, diverse learning and career pathways” - and get a return on investment in the process. The focus here is on economics and diverse learning.

### The economics of this plan don't work: not for jobs, not for justice, not for financial return

People of Hawaiian heritage are leaving the island at greater rates than any other ethnic group. Why? Wages for hospitality industry service workers are too low to make even modest housing affordable. A resort hotel and high end restaurant would perpetuate a business model that depends on low paying service jobs and would reinforce cultural stereotypes of Hawaiians as entertainment features and/or servants for more affluent visitors.

Ownership of Hawaii hotels by private equity investment companies has gone from 4% twenty years ago, to 29% this year. 27% of hotels on this island are already owned not by hoteliers, but by investment companies, who use debt to acquire distressed properties (like the nearby Sheraton/Outrigger), renovate them enough to jack up prices, then squeeze labor in the name of “operational efficiencies” at the expense of working conditions and the aloha spirit. All in order to flip the property to another debt-financed buyer, or refinance with more debt, used to pay off investors and raise rates again, but not raise up their workers.

The competitive landscape for both workers and customers - for a high-end restaurant in this location is not good either. Two high end restaurants within a quarter mile have failed. Economics haven't work in the off season. Owners can't afford to keep good help. Chef's leave, making it hard to control quality. As for customers, a planned huge new *Duke's* restaurant at the Outrigger (practically next door), with positive brand recognition, tested staff and a profitable business model, will open in 2025, taking significant market share.

KS asserts the hotel/restaurant project is needed to finance their educational initiatives, but the numbers don't work. It would need to generate \$5 million in operational profits each year just to match the cash return from keeping the proposed \$100 million investment (hotel and restaurant only) in a safe CD. But with the number of high end rooms (including VRBO) already exceeding visitors to fill them, risk is high. Transferring the risk to a management company increases pressure to maximize efficiencies at the expense of worker well-being, often including loss of health care benefits, less secure paid hours, and loss of seniority.

### There is a better, less risky alternative for social, economic, learning and career goals

Good paying jobs of the future will build on Hawaiian heritage, not by making the past an object for tourists to consume, but by re-imagining how the wisdom and technologies of the ancestors can inform and be informed by today's technologies and today's people. That goal can be met by focusing development of the targeted *mauka* space on the fourth of five primary KS management strategies: Maintain and Establish New Place-based Cultural Education Areas.

Cultural Education is about looking forward as well as back. It is about honoring today's workers, not just yesterday's royalty - having an accessible place for *kupuna* to share their history, *kanaka* to share work and play experience, and *keiki* to begin writing the next chapter

of shared history. It is recognizing that play and sports have long been part of Hawaiian culture. They are effective, evidence-based means of education as well as entertainment.

The proposed alternative plan for this location would maintain several acres of vegetation up mauka, as a barrier to golf course runoff. The remaining acres would become a state of the art **Play and Learn Center**, with no-tech, low-tech and high-tech options. Operations would be funded by a combination of tiered, pay-to-play fees that favor local families with generational ties, then *kama'aina*, then visitors. It could include paid sponsorship of some spaces, with limited advertising; and grant funding for continuing innovation.

**No tech:** Demand focused, small footprint, shaded

- Sports courts for Volleyball, Pickleball, *Ulu Maika* (rolling stone disks)
- Picnic areas with tables and large barbecue grills, shaded viewing benches

**Low tech:** Leveraging ubiquitous smart phones and basic GPT

- Distributed, educational, outdoor posts with posters about the *'aina*, plants, sea, sky, with QR codes to extend learning via video on personal phones
- Learn by Doing huts: *Talk Story* (oral history), *Learn Hula*, *Learn 'Olele*, *Huts*, made with traditional materials; personalized experiences delivered through AI
- Telescopes: One for moon and sea, one for deep sky, one for wheelchair access

**High tech:** AI to increase empathy, place-based identity and *malama 'aina*, *malama kai*

- *Facelife:* Transform your race, gender, even species by degrees, to see at what point you become other, and/or they become you.
- *Fishite:* Use your mind and muscle to land a big marlin, without the cost of the boat
- *Finalite:* Bird and bug watchers' treasure hunt
- *HoldOn-Holua:* VR toboggan ride down the side of this very mountain
- *Choosing Hawaii:* Videogame of choices and consequences to sustain Hawaii island

Instead of more new buildings for affluent tourists, with 150+ more toilets, and even more cars above Keaou Bay, this alternative would conserve land, cost just 10% of the \$125 million project budget, and provide a reasonable financial return of 8% above operating costs after three years. That would leave \$100 million to invest in the affordable housing desperately needed by working families and *kupuna*, and provide construction jobs in the process.

**About the Author:** Alice Ray, MBA, is a *kama'aina kupuna* who lives less than ¼ mile from Keaou Bay and co-founded the non-profit He Iia Bay Forever. Business Schools at UW, and UC, Berkeley, have honored her with awards for leadership as a social entrepreneur. Her interactive software designs, similar to the proposed high tech options cited here, travelled with the Lalapaloa Concert Tour and were widely featured in national media. She has consulted to dozens of non-profits on how to make good works good business. She is co-founder, CEO for 23 years, and current Board Chair of Ripple Effects, which provides technology-enabled resources to strengthen children's resilience in the face of challenge, including in ten public schools on Hawaii Island. An Education Fellow in the Aspen Global Leadership Network, she has received more than 50 major awards from education, health, software and communication industries, for creative achievement, product excellence, social leadership and entrepreneurial success, as well as regional emmys and national film awards. She is happy to consult on technology development for the proposed *Play and Learn Center*.

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**From:** Juhl Rayne <[REDACTED]>  
**Sent:** Thursday, August 1, 2024 5:00 PM  
**To:** 221053-01 KS Keaouhou Entitlements  
**Subject:** kam schools eis draft will have negative impact!!!

**Categories:** Yellow Category

To whom it may concern,

Please reject Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keaouhou Bay.

Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "*What is the biggest source of pollution in the ocean?*" by NOAA, *National Oceanic and Atmospheric Administration*, states, "*When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides.*" It also states, "*Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff.*"

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "*Putting the Earth in Play: Environmental Awareness and Sports*," shares that the golf industry uses [approximately 50 pesticide active ingredients](#), including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keaouhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endangered these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,  
Juhl rayne



**From:** Riley Reynolds <[REDACTED]>  
**Sent:** Wednesday, July 10, 2024 1:25 PM  
**To:** Keaouhoubay@ksbe.edu  
**Cc:** Alex.Roy@hawaiicounty.gov; 221053-01 KS Keaouhou Entitlements; Planning@hawaiicounty.gov  
**Subject:** Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT!

**Categories:** Yellow Category

To whom it may concern,

Please, read the scientific proof below and state in your report that this Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT in Keaouhou Bay as stated in all the different reported articles below.

Keaouhou Bay has the trees and land just under the golf course (that Kamehameha Schools wants to clear for their bungalow resort) that protects Keaouhou Bay from a lot of algae blooms because it soaks up pollution that is runoff from fertilizer, weed killer... in the golf course, and unfortunately when there is a severely heavy rain storm the land up on top of the bay has a greater runoff than normal from the golf course and an algae bloom happens.

The photos below were taken by Rebecca Melendez and they show this kind of an algae bloom that happened in Keaouhou Bay Feb. 13, 2023.

If you clear this land, this kind of algae bloom will happen a lot more often and end up killing a lot of coral and marine life as stated in the two Global Coral Reef Alliance articles below because this is what happened in the Bahamas when they researched the reef before and after a golf course development, and even though this development is not a golf course development, it will be just under one and this will allow the pollution from the golf course to come down to the bay a lot more often.

This information was taken from Global Coral Reef Alliance titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution..  
". <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keaouhou Bay you WILL be agreeing to pollute this bay for years to come because the golf course runoff won't have the best protection which is the natural trees and land that can soak up the polluted water most of the year and this kind of harmful algae bloom will happen more often.

Here is another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef

...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>



Algae Bloom photos above taken in Keaouhou Bay Feb. 14, 2024.

Green Sea Turtle photos below taken in Keaouhou Bay September 25, 2022.



The green sea turtle that is federally protected and can be seen in Keaouhou Bay weekly. Please see the following article that states "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Even with storm drains if you allow this development it WILL POLLUTE Keaouhou Bay as the above article (that was written in 2014 because runoff water from developments were polluting the ocean even then) states, and this bay holds many sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals that have rested on the dock before and...that will ALL be harmed by the more severe pollution runoff that WILL happen because developments can't help but pollute the water nearby.

Keaouhou Bay is a DOCUMENTED RESTING AREA for the ENDANGERED MONK SEAL, and if a resort is allowed to be built, that will bring a lot more people down to Keaouhou Bay and if a monk seal is resting they most likely will disturb the monk seal with their selfies because it is fully known this is now a SELFIE CULTURE.

This information is by NOAA Scientist, "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media."

There's a seal on the beach! Let's go get a 'sealife'!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-try-foul-over-selfies>

Has there been a detailed traffic study for the increase in cars that will be added to this already severely traffic area?

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution."

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development/#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs>.

If you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years and, "Noise Pollution

Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behaviour of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations>.

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project, because it is scientifically proven that developments will ALWAYS have rain runoff that will pollute nearby waters constantly during development and after.

Please, read the Scientific articles below written by NOAA, National Oceanic and Atmospheric Administration and other professional organizations, that prove that developments have ALWAYS polluted the water in every coastal developed area.

The coral all over Hawai'i has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all Aquatic Life there, and even the Manta Rays that go there to eat zooplankton from the Manta Ray tours at night, and they eat it during the day in that area as well because they need to eat 5 times their body weight in zooplankton daily. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

If you allow this bay to be developed you will be allowing all types of marine life to die and there is NO WAY to stop this from happening because polluted runoff rain water from developments can't be fully stopped. It is what has happened in ALL coastal developments.

Please read the Scientific proof below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawai'i. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts statewide..."

This was the third major bleaching episode in Hawai'i over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off)." <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,had%20catastrophic%20impacts%20statewide>.

This article is by the Coral Reef Alliance here in Hawai'i. "An ecosystem under threat Hawai'i's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawaii%CA%BBi's%20reefs%20face%20major%20global,into%20Hawaii%CA%BBi's%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA. "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status-report/docs/Hawaii\\_status\\_report\\_forw\\_b.pdf](https://www.coris.noaa.gov/monitoring/status-report/docs/Hawaii_status_report_forw_b.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information. "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawai'i." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The Chesapeake Bay has a foundation that is trying to save it due to runoff pollution that was caused by developments, and the Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed because this bay is very small.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted->

[runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.](#)

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay because it is so much smaller than the Chesapeake Bay.

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%20based%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_coral/coral09\\_humantreats.html#:~:text=Th is%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_coral/coral09_humantreats.html#:~:text=Th is%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_coral/coral09\\_humantreats.html#:~:text= This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_coral/coral09_humantreats.html#:~:text= This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

The manta rays go to Keauhou Bay every night to eat zooplankton and if you allow this development that WILL have runoff water, you WILL be causing zooplankton to be seriously affected because as this article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that proves runoff from development in this area will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon. The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of chl- $\alpha$  concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

"Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain." This information is in article by MarineBio. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20als%20sensitive%20to,light%20and%20increases%20in%20predation.>

Here is a research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton. There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation." [https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

The above articles show that development of Keauhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this could cause the manta ray food source to disappear and that will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on the manta ray tour for their income.

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will forsure bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regards to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii! The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian Islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96309858#:~:text=The%20less%20people%20at%20a,there%20are%20C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20study%20said.>

If you allow this resort to be developed, you will be destroying the coral reefs in the bay because this bay is extremely small and used by a lot of locals already for fishing, canoeing, swimming, snorkeling, paddle boarding, surfing, boating...it can't afford more use by many thousands more people yearly.

If you allow Keauhou Bay to be developed there will be a higher population in the bay and that will hurt the coral in the bay as well, because it's known that, "Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with metapopulation theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science

Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation

management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgONhahhJAnWAq453tRgN0AIWcl9mR3ZoTv0PvGzA5lc-H001zcHNIP3ASnhcgKRy6\\_vKLPw494bmbY0xS63Y1Mg0IGBZsapdGUH701SLbu9x5Pr3xED4KxI4T0sIlvgO1a72ZRk3rUbraXpoodId2AoNJSmWSuxB7JEDqplj8OGIpx71TIWdCFXvFKIIZYeNdcj3Sw\\_dnaUjg5ZlhcjPBDImmaH15yqT50%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgONhahhJAnWAq453tRgN0AIWcl9mR3ZoTv0PvGzA5lc-H001zcHNIP3ASnhcgKRy6_vKLPw494bmbY0xS63Y1Mg0IGBZsapdGUH701SLbu9x5Pr3xED4KxI4T0sIlvgO1a72ZRk3rUbraXpoodId2AoNJSmWSuxB7JEDqplj8OGIpx71TIWdCFXvFKIIZYeNdcj3Sw_dnaUjg5ZlhcjPBDImmaH15yqT50%3D&tracking_referrer=abcnews.go.com)

A Resort Development WILL Increase Traffic on Already Severely Trafficed Roads

The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side.

Allowing another resort to be developed will bring more cars that will lead to a lot more traffic that the island can not handle, please read the articles below by different NEWS companies that prove this point.

This NEWS article by Hawai'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year."

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%.<sup>4</sup> Please watch their video on their link below because it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists comes more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state, This time last year Hawaii island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks...

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is the same for Big Island. The traffic problems they talk about are the same issues here on Big Island, and this article also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

Please, watch the NEWS video from the link below on aerial footage in Hilo because the footage shown is the same thing that is happening on Alii Drive and Queen K HWY, and for the same reasons.

There are 2 developments already on Alii Dr. being built as of today, and more are scheduled for this road in the near future, and Alii Dr. and Queen K HWY are the roads Kamehameha Schools Bungalow Resort will be using if approved and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow aready.

The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well.

See the photo below that proves this point in Kona, and here is the NEWS article by KITV NEWS that talks about Hilo and the same thing is happening in Kona on the roads Kamehameha Schools wants to develop their resort, "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the T-traffic jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash on Alii Dr. and when there is an accident on this road, it turns into only one lane that needs a flagger to help direction traffic. and that adds even more traffic to this already seriously congested road, and Kamehameha Schools wants to add a resort on this road, and that will increase the traffic even more.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FOSsmPDii8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Please read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path as well as The Law of the Splintered Paddle below <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law, "Kʻŏhʻwai Mʻmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless (especially kʻpuna and keiki) across Hawaiʻi be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawaiʻi. After being added back in 1978, the law is part of Hawaii's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

The Law of the Splintered Paddle is also on Kamehameha Schools website, so they should want to help make Big Island roads become safer and not add to the traffic and possible traffic death toll problem. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ting-true-200-years-after-k>

Besides a resort development in Keaouhou Bay causing runoffs that will severely pollute the bay as the above research and science articles have shown above causing marine life to die, it will also increase in the bay's population that will seriously add to damaging even more coral, plankton and all marine life as well, and the island has severe traffic issues already with increased death tolls rising, and a resort development in Keaouhou Bay will totally increase even more traffic in these already severely congested traffic areas.

The Big Island Doesn't Have the Resources and Infrastructure for Another Resort

Please see the articles below because the Big Island doesn't have the resources or infrastructure to safely add another resort development on island and these other NEWS and Research articles prove this point.

#### 1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste  
Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables?" BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables->

5) "The overwhelming plastic waste Hawaii visitors leave behind  
By Natasha Bourin/Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A county commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawai'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawai'i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawika Uyehara, deputy director of Hawaii's Department of Water Supply. <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) U.S. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues  
By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "we're in deep trouble."  
<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) NewsHawaii County issues mandatory 25% water restriction for North Kona  
August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.  
<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawaii Water Supply Closely Monitored As Severe Drought Continues  
by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawaii, the Hawaii County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.  
<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-CA%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

20) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters  
Hawaii Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii Department of Health. " <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "BIG ISLAND NEWS HECO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island  
February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) "LOCAL NEWS  
HECO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night" <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii Public Radio | By Savannah Harriman-Pote  
Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month.

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/?rdt=52660)

21) "NewsHawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 - 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will damage Keaouhou Bay coral and marine life and, Big Island resources and infrastructure are currently being negatively affected from the development that is on island already, and there are years of new development that have already been approved, before having safe resources and infrastructures for new developments.

With these scientifically proven articles by some of the most professional scientists in the world, they say the a serious population increase, as well as development and resort runoff that happens because of parking lots, and... with all coastal developments, it will be dangerous for Keaouhou Bay to be development because it will damage the marine ecosystems in the area.

Please, save Keaouhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools because all of these articles prove it would be extremely damaging to the waters at Keaouhou Bay.

Thank you,

Sincerely,

Riley Reynolds

**From:**

Ben Rice <[REDACTED]>

Wednesday, August 7, 2024 9:34 AM

**Sent:** 221053-01 KS Keaouhou Entitlements; Alex.Roy@hawaiicounty.gov;

**To:** Planning@hawaiicounty.gov; KeaouhouBay@ksbe.edu; [REDACTED]

**Subject:** Keaouhou Bay / Proposed Project

**Categories:** Yellow Category

Once again, I am outraged by Kamehameha Schools/Bishop Estate. We all know of their long history of ignoring the Hawaiian people they claim to watch out for. "Broken Trust," winner of "Hawaii Book of the Year 2007, was an eye-opener for some of us, but it was "old news" for many. Now, they want to sacrifice one of the most important cultural sites that remain mostly undisturbed on the Big Island--Keaouhou Bay. Why? So that tourists will have another beautiful location to stay in. They claim that their 150 new bungalows, a high-end restaurant, and shops will lead to more native Hawaiian children enjoying the beach. This claim is false and outrageous. The narrow Bay and tiny beach can't comfortably hold more than 50 people. The nearby Outrigger Kona Resort & Spa, with its 508 rooms, doesn't have a beach, and if Keaouhou makes the beach "nicer," the guests there will want to enjoy it, too. Who do we think will wind up enjoying the tiny beach? When will we as a community take on Kamehameha Schools/ Bishop estate? As a result of the Maui fire settlement, they will pay a tremendous amount of money because they failed to protect Lahaina and its people by not removing grasses that had already been recognized as a fire threat. What's next? Paying for a cultural and environmental disaster by ruining the birthplace of Kamehameha III? Please review the many environmental letters filed with the county complaining that the "studies" Kamehameha Schools rely on are far short of what is demanded under State and Federal law.

Ben Rice

Tamyra Rice

Please consider the contents of this uploaded file. Thank you.

Tamyra Rice

[Redacted]

August 4, 2024

COMMENTS REGARDING:  
Draft Environmental Impact Statement (DEIS)  
for the Kamehameha Schools Keauhou Bay Management Plan  
Keauhou, Hawaii Island, Hawaii'

My husband and I have owned property in the neighborhood adjacent to the project area since 2013 and stay there for several months yearly. I offer the following comments.

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<https://www.nature.org/en-us/about-us/where-we-work/latin-america/brazil/stories-in-brazil/deforestation-and-climate-change/>

“Reduced rainfall from climate change reduces submarine groundwater discharge and increases salinity of nearshore waters. Future urban development coupled with elevated water demand will likely further decrease submarine groundwater discharge and increase salinity in coastal springs. Protecting native forests prevents the further loss of freshwater and further increases in salinity.”

<https://www.hawaii.edu/news/2023/07/27/protecting-native-seaweed-species/>

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As shown by the photographs in Dr. Bennett’s Comment Letter, I have witnessed street runoff spilling over the street curb and pathway at the end of Kamehameha III Road and dumping muddy water from the boat storage facility into the Bay.

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“protection be in perpetuity.” In 2014, the federal Environmental Protection Agency (“EPA”) concluded that the Bay was “good” for recreational use, but “impaired” due to “turbidity” as it relates to “Fish, Shellfish, And Wildlife Protection and Propagation.”

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Unfortunately, more up-to-date information is not available from the EPA.

Mitigation measures in the form of proper waste disposal and drainage from the existing boat storage area to the Bay would be appropriate. However, the DEIS does not adequately address this concern.

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As pointed out in Dr. Bennett’s July 24, 2024 Comment Letter:

“The draft EIS makes no mention of nutrient pollution issues and implies that all new developments will be connected to the sewer line that transmits raw sewage to the Heeia wastewater treatment plant. The treated wastewater containing most of the nutrients in human waste is conveyed to the golf course to irrigate the golf course. It is not known the extent to which those nutrients leech into the groundwater and the Bay. It is also not known how much more water the golf course will utilize in the future.

Several residences and perhaps some commercial facilities in the proposed development area use cesspools or septic systems for human waste management. The impact on the Bay is significant and needs to be described and mitigated. However, this problem is not mentioned in the DEIS. It is more than advisable that the Project connect all waste systems to the regional sewer.

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some sewer lines are quite old. One such line on the East shore of the Bay broke during a significant tidal event. The DEIS does not account for sewer line leakage or the risk from extreme tidal events. This need needs to be evaluated, and where sewer lines are at risk and need to be replaced by resilient lines such as High-Density Polyethylene (HDPE).”

Mitigation measures would thus entail an assessment and possible upgrading of the sewer lines currently under the project area. The DEIS does not discuss the possible overloading of the current wastewater discharge or the leeching potential. Mitigation measures would also include a study to ascertain whether the addition of a 150-unit resort and other buildings would overload the current wastewater discharge used to irrigate the nearby golf course and whether there is leeching into the groundwater and the Bay.

c.) Use of the Boat Ramp and Discharge of Pollutants:

Current usage of the boat ramp results in the discharge of pollutants into the Bay. Most boat owners do not use ocean friendly detergents to washdown the boats, but rather harmful cleaners which go directly into Keauhou Bay. Another product used extensively by commercial fishermen (often late at night) is Clorox bleach, which is essential to sanitizing fish boxes to minimize the proliferation of bacteria, and its transfer to the next catch.

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The DEIS fails to discuss these current negative practices. Mitigation efforts might include stopping the use of the current area for washdown and installing a completely new washdown area for boats- one that is fully isolated and prevents wastewater from entering the Bay.

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The construction trucks needed to implement this plan alone will add dust, traffic, and noise to otherwise quiet neighborhood. The DEIS concedes this point.

Once the 150-unit resort is built, assuming at least a two-person occupancy rate per unit with one rental car per unit, congestion will be magnified. The resort will also have employees- additional persons. The DEIS states: “An increase in visitor accommodations will result in an increase in water consumption, wastewater disposal, and solid waste generation. Therefore, there will be increased demand on existing utilities and infrastructure.” (DEIS at 4.16) However, there is an inadequate discussion of how these people will impact the area, specifically, their foot traffic and their access to and use of this tiny Bay.

Congestion already exists due to various users of the Bay: Outrigger Kona Resort & Spa guests, the popular Ho‘oulu Community Farmers Market visitors, the Canoe Club members, tourists visiting cultural sites, customers of Fair Wind Cruises, Dolphin Discoveries, and Sea Quest, kayakers, fishermen, divers, paddlers, snorkelers, swimmers, and park goers. This congestion will be amplified by those visiting and working at the proposed 150-unit resort, the restaurant, the retail center, and the cultural/educational center.

The DEIS accurately states that the area is already congested: “High demand among the Keauhou Bay user groups has resulted in vehicle, pedestrian, and in-water congestion and conflicts.” (DEIS at 2.6.3) The DEIS goes on to state: “Existing vehicle and pedestrian circulation patterns across Keauhou Bay have evolved over time to serve a variety of changing land uses within a small, constrained area. The current situation presents both functional and hazardous conflicts between pedestrians, bicyclists, and vehicles (cars, buses, delivery trucks, and boat trailers), as well as wayfinding challenges along the immediate

bayfront.” (DEIS at 2.6.5) Yet, the DEIS only offers to add more bodies, buildings, noise, and vehicles to the equation.

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Possible mitigation measures include foregoing the construction of a 150-unit resort, performing traffic studies and ambient noise level studies at the busiest times of the year that accurately address the impacts on adjacent neighborhoods and streets.

The DEIS adversely and significantly impacts marine life and other wildlife.

Keauhou Bay is home to certain species of sea turtles, dolphins, whales, manta rays, sharks, monk seals, corals, and seaweed which are all threatened or endangered.

<https://www.fisheries.noaa.gov/pacific-islands/conservation/marine-protected-species-hawaiian-islands>

The DEIS states: “Both endangered Hawaiian monk seals (*Monachus schauinslandi*) and the threatened Pacific green sea turtle (*Chelonia mydas*) are regularly reported from Kona waters (David, 2022). Although unlikely, either species could haul out along the shoreline close to the dock or by the beach landing. If either species is detected within 300 ft of ongoing construction, operations must cease and not continue until the animal has departed the area on its own accord.” (DEIS 4.6)

Such mitigation measures address only part of the problem, namely what happens during the construction phase of the project. The DEIS states: “The Project involves the establishment of a recreation corridor, expansion of open space, and improved access to the shoreline.” (DEIS at 4.10) After the construction of the 150-unit resort, what impact will the additional tourist population (approximately 300 persons at any given time), who have improved access to the shoreline, have on these species when they are on the beach? Case in point: in a 2019 study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals and they discovered that human disturbance is more common than they thought.

<https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

Additionally, the DEIS misconstrues the legal standard regarding threatened species. The legal standard is not whether there is “any existing habitat...[that] is essential for the continued survival of listed species” but whether there is a “taking” (a threat to endangered species).

If there is a “taking” then a federal permit and a Habitat Conservation Plan is required. The DEIS does not mention this requirement.

The DEIS states: “Nēnē (*Branta sandvicensis*) is present in North Kona, but so far not seen in the Keauhou area (David, 2022).” (DEIS at 4.6)

Nēnē has recently been sighted and photographed at the project area. Nēnē is listed as endangered by the State of Hawaii and federally listed as threatened. They are protected under the federal Migratory Bird Treaty Act. The DEIS does not contemplate this finding.

The DEIS substantially affects these threatened and endangered species, and their habitat in the ways enumerated above, namely by increasing the number of tourists interfacing with these species and by worsening climate change effects and the Bay’s water quality.

#### Conclusion

In sum, the DEIS enumerates impacts and mitigation measures, but those are either inaccurate or only half of the story. The DEIS fails to contain: 1) an *accurate* description of the probable impacts of the project including the direct, indirect and cumulative impacts, as well as impacts on both the natural and human environments; 2) a *sufficient* statement of the unavoidable environmental impacts caused by the project and a rationale for proceeding with the project in light of these impacts; and 3) *consideration of all* mitigation measures proposed to avoid, minimize, rectify, or reduce the project’s adverse impacts. (See Hawai’i Revised Statutes Chapters 343 and 344; Hawai’i Administrative Rules 11-200.1.)

Sincerely,  
Tamyra Rice

Distributed to:

[KeauhouBay@g70.design](mailto:KeauhouBay@g70.design)

[Alex.Roy@hawaiicounty.gov](mailto:Alex.Roy@hawaiicounty.gov)

[Planning@hawaiicounty.gov](mailto:Planning@hawaiicounty.gov)

[Keauhoubay@ksbe.edu](mailto:Keauhoubay@ksbe.edu)

Mayor Mitch Roth- [REDACTED]

Council Member Michelle Galimba, House District 6-

[REDACTED]

Council Member Rebecca Villegas, House District 7-

[REDACTED]

Council Member Dr. Holeka Goro Inaba, House District 8-

[REDACTED]

Civil Beat [REDACTED]

Hawai'i Public Radio- [REDACTED]

Tamyra Rice

---

**From:** Ben Rice <[REDACTED]>  
**Sent:** Monday, August 5, 2024 6:56 AM  
**To:** 221053-01 KS Keauhou Entitlements; Keauhoubay@ksbe.edu  
**Subject:** Proposed Development of Keauhou Bay  
**Attachments:** Final TR Comment Letter.docx  
**Categories:** Yellow Category

Good morning-  
Please consider the attached comment letter regarding Keauhou Bay.  
Thank you, Tamyra Rice

Tamyra Rice

██████████  
██████████  
██████████

August 4, 2024 |

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Keauhou Bay is home to certain species of sea turtles, dolphins, whales, manta rays, sharks, monk seals, corals, and seaweed which are all threatened or endangered.

<https://www.fisheries.noaa.gov/pacific-islands/endangered-species-conservation/marine-protected-species-hawaiian-islands>

The DEIS states: “Both endangered Hawaiian monk seals (*Monachus schauinslandi*) and the threatened Pacific green sea turtle (*Chelonia mydas*) are regularly reported from Kona waters (David, 2022). Although unlikely, either species could haul out along the shoreline close to the dock or by the beach landing. If either species is detected within 300 ft of ongoing construction, operations must cease and not continue until the animal has departed the area on its own accord.” (DEIS 4.6)

Such mitigation measures address only part of the problem, namely what happens during the construction phase of the project. The DEIS states: “The Project involves the establishment of a recreation corridor, expansion of open space, and improved access to the shoreline.” (DEIS at 4.10) After the construction of the 150-unit resort, what impact will the additional tourist population (approximately 300 persons at any given time), who have improved access to the shoreline, have on these species when they are on the beach? Case in point: in a 2019 study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals and they discovered that human disturbance is more common than they thought.

<https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

Additionally, the DEIS misconstrues the legal standard regarding threatened species. The legal standard is not whether there is “any existing habitat...[that] is essential for the continued survival of listed species” but whether there is a “taking” (a threat to endangered species).

If there is a “taking” then a federal permit and a Habitat Conservation Plan is required. The DEIS does not mention this requirement.

The DEIS states: “Nēnē (*Branta sandvicensis*) is present in North Kona, but so far not seen in the Keauhou area (David, 2022).” (DEIS at 4.6)

Nēnē has recently been sighted and photographed at the project area. Nēnē is listed as endangered by the State of Hawaii and federally listed as threatened. They are protected under the federal Migratory Bird Treaty Act. The DEIS does not contemplate this finding.

The DEIS substantially affects these threatened and endangered species, and their habitat in the ways enumerated above, namely by increasing the number of tourists interfacing with these species and by worsening climate change effects and the Bay’s water quality.

#### Conclusion

In sum, the DEIS enumerates impacts and mitigation measures, but those are either inaccurate or only half of the story. The DEIS fails to contain: 1) an *accurate* description of the probable impacts of the project including the direct, indirect and cumulative impacts, as well as impacts on both the natural and human environments; 2) a *sufficient* statement of the unavoidable environmental impacts caused by the project and a rationale for proceeding with the project in light of these impacts; and 3) *consideration of all* mitigation measures proposed to avoid, minimize, rectify, or reduce the project’s adverse impacts. (See Hawai’i Revised Statutes Chapters 343 and 344; Hawai’i Administrative Rules 11-200.1.)

Sincerely,  
Tamyra Rice

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Council Member Michelle Galimba, House District 6-

-

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-

Civil Beat-

Hawai’i Public Radio-

## Cyndi Richmond

Building bungalows in Keahou bay sounds like an idea not completely thought out. The permanent devastation this would cause based on the environmental impact report alone should be enough evidence. How about get a little more creative in coming up with ways to fund the school system. I would rather be taxed on a school bond than have Keahou bay permanently ruined. We put our kayaks in the bay frequently & this would ruin the bay!

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**From:** Jason Rigmaiden <[REDACTED]>  
**Sent:** Monday, August 5, 2024 2:32 PM  
**To:** 221053-01 KS, Keaouhou Entitlements  
**Subject:** Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT

**Categories:** Yellow Category

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keaouhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.

ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED

The green sea turtle is federally protected and can be seen in Keaouhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Allowing this development WILL POLLUTE Keaouhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keaouhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>



These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

#### ALGAE BLOOMS KILL CORAL AND MARINE LIFE

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution. . . "

<https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

FURTHERMORE: "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

#### ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats."

<https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearly%2085%20percent.pipeline%20spills%2C%20sa ys%20a%20new>

The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershepherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

LEARN FROM OTHERS:  
RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak

into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keahou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keahou Bay due to its size and fragility.

#### MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keahou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii". Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide...

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban runoff). " <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event>

[hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,had%20catastrophic%20impacts%20state%20wide.](#)

This article is by the Coral Reef Alliance here in Hawaii. "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawai%CA%BB%20reefs%20face%20major%20global,into%20Hawai%CA%BB%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban runoff, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keahou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral>

[pollution.html#:~:text=impacts%20from%20land%2Dbased%20sources.and%20mortality%20in%20sensitive%20species.](#)

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead.services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris."

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments.organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments.organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)"

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments.inte%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments.inte%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments Kill Marine Life

This article by MarinBio states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBio.

<https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to.light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.egc.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.egc.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development/#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built, and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20gate,er.to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs,

which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability. " <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites->

<https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-?site=science&story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20stud,y%20said.>

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management."

[https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaHjAnWAq453RgN0AJWl9InR3Z0Tv0PvGzA5ic\\_H001zcHNIP3ASnhcgkRy6\\_XkLEw49dbmBXoXs3Y1MgQIGBZsappdGUH7ZO1SLbu9xSP3xED4kI4TOslvgQIa7Z2R3JUbrazpodt42A0nISmWSuX87JfEDpJb8OCjpx7TIWdCfXFKJZVeNdcJ3Sw\\_dnaUg5ZlncjPBDlmmaH15yqI5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaHjAnWAq453RgN0AJWl9InR3Z0Tv0PvGzA5ic_H001zcHNIP3ASnhcgkRy6_XkLEw49dbmBXoXs3Y1MgQIGBZsappdGUH7ZO1SLbu9xSP3xED4kI4TOslvgQIa7Z2R3JUbrazpodt42A0nISmWSuX87JfEDpJb8OCjpx7TIWdCfXFKJZVeNdcJ3Sw_dnaUg5ZlncjPBDlmmaH15yqI5Q%3D&tracking_referrer=abcnews.go.com)

INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste each year." <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keauhou Bay. On Hawaii'i Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawaii'i landfill

September 17, 2023

The West Hawaii'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawaii'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

A County commission drafts ordinance aiming to ban recyclables at West Hawaii'i landfill

By Megan Moseley September 6, 2023

Hawaii'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawaii'i County Director of Environmental Management, told commissioners the West Hawaii'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawaii'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resultin

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keauhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keauhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.

#### ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

#### FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED

The green sea turtle is federally protected and can be seen in Keaouhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According

to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Allowing this development WILL POLLUTE Keaouhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keaouhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

#### THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keaouhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keaouhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keaouhou Bay will likely be changed forever.

This information is from a NOAA Scientist; "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cy-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS)/Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Please read from Wikipedia, "

Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping

system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEE-7.15.14.pdf> where the Hawaii government states that Natural Ground Cover has 10% runoff, where has

development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keauhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

#### ALGAE BLOOMS KILL CORAL AND MARINE LIFE

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

Keauhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keauhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keauhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project.

#### GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution. . . "

<https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

FURTHERMORE: "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

#### ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars

(likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats."

<https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2022/09/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20says%20a%20new>

The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwaterishepheids.org.au/blog/the-impact-of-stormwater-car-emissions/>

#### NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust  
<https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

LEARN FROM OTHERS:  
RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams....Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?



It's Been Proven Resort Developments KILL Marine Life

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to%20light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

27

## HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the

28

marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National Center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20gr eater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%20C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%20C%20a%20new%20stud y%20said.>

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management."

[https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=w5akgQNhaihJAnWAg453IRgN0AJWveI9jnR3oTlv0PyGZA5lc\\_H001zeHNIP3ASnhcgkRy6\\_vkLPw49dbmBYoXsg3Y1MgQIGBZsapdGUH17O1SIbu9x5P3xED4kxI4To5JlvgQ1a7ZRR3JUbrazpodJd2AolNlSmW5uxBZJfEDdpJ8OGJpX71TW6CfXvFKJZYVeNdcjJssw\\_dnaLj5ZlhcjPBDImmaH15vqI5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=w5akgQNhaihJAnWAg453IRgN0AJWveI9jnR3oTlv0PyGZA5lc_H001zeHNIP3ASnhcgkRy6_vkLPw49dbmBYoXsg3Y1MgQIGBZsapdGUH17O1SIbu9x5P3xED4kxI4To5JlvgQ1a7ZRR3JUbrazpodJd2AolNlSmW5uxBZJfEDdpJ8OGJpX71TW6CfXvFKJZYVeNdcjJssw_dnaLj5ZlhcjPBDImmaH15vqI5Q%3D&tracking_referrer=abcnews.go.com)

INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste each year." <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keauhou Bay. On Hawai'i Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill

September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill>

A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill

By Megan Moseley September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill>

Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resultin

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keaouhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.

#### ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

#### FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED

The green sea turtle is federally protected and can be seen in Keauhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Allowing this development WILL POLLUTE Keauhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keauhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

#### THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keauhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keauhou Bay will likely be changed forever.

This information is from a NOAA Scientist; "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keauhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keauhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keauhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§ 195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hisrcurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hisrcurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hisrcurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hisrcurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project.

#### GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses approximately 50 pesticide active ingredients, including chl orpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "  
Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epp/files/2013/09/Stormwater-MS4-Presentation-HEE-7.15.14.pdf> where the Hawai'i government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keauhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

#### ALGAE BLOOMS KILL CORAL AND MARINE LIFE

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution. . . " <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keaouhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

FURTHERMORE: "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

#### ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keaouhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keaouhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keaouhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats."

<https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to

minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20sa ys%20a%20new>

#### The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwaterishepheids.org.au/blog/the-impact-of-stormwater-car-emissions/>

#### NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keaouhou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean-ways-to-think-ocean/>

#### How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation->

[districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.](#)

What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

#### LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow...

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20leopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

#### MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawai'i. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide..."

This was the third major bleaching episode in Hawai'i over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off). " <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,had%20catastrophic%20impacts%20state%20wide.>

This article is by the Coral Reef Alliance here in Hawai'i. "An ecosystem under threat Hawai'i's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawai%CA%BBi%20reefs%20face%20major%20global%20Hawai%CA%BBi%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019. ...

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii". <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=impacts%20from%20land%2Dbased%20sources.and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead.services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments.orgamisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments.orgamisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments.into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments.into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO.

<https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to%20light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

#### HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

Does EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed.

<https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20grater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites->

<https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20stud>

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keaunoh Bay. On Hawai'i Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill

September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill>

A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill

By Megan Moseley September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture,%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management."

[https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakqNhaHhJAnWAg453RnG0JAiWei9inR3ZoIv0PvGzA5lc\\_H0Q1zeHNIP3ASnhcgkRy6\\_vkLpW49dbmBYoXsg3Y1MgQIGBzsapdGUHj7O1SIbuw9x5Pr3xED4kxI4IOsIVgQ1a7ZRR3UbraxpodJd2AoNlSmW5uxB7JjEDdpJ8OGJpx71TIWqCfXvFKlZVeNdcJssw\\_dnaUjg5ZlhcjPBDImmaH5yqI5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakqNhaHhJAnWAg453RnG0JAiWei9inR3ZoIv0PvGzA5lc_H0Q1zeHNIP3ASnhcgkRy6_vkLpW49dbmBYoXsg3Y1MgQIGBzsapdGUHj7O1SIbuw9x5Pr3xED4kxI4IOsIVgQ1a7ZRR3UbraxpodJd2AoNlSmW5uxB7JjEDdpJ8OGJpx71TIWqCfXvFKlZVeNdcJssw_dnaUjg5ZlhcjPBDImmaH5yqI5Q%3D&tracking_referrer=abcnews.go.com)

#### INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?

There are many big housing developments currently under construction in Kailua Kona, Waikōloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste each year." <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill>

#### Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resultin

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keaouhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.

ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/andangered-species-conservation/andangered-species-act>

FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED

The green sea turtle is federally protected and can be seen in Keaouhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Allowing this development WILL POLLUTE Keaouhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keaouhou

Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

#### THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keaouhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keaouhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keaouhou Bay will likely be changed forever.

This information is from a NOAA Scientist: "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keaouhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keaouhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keaouhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keaouhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§ 195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keaouhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keaouhou Bay and the surrounding area during the building phase of this enormous project.

#### GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keaouhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epp/files/2013/09/Stormwater-MS4-Presentation-HEE-7.15.14.pdf> where the Hawai'i government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keauhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

#### ALGAE BLOOMS KILL CORAL AND MARINE LIFE

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution. . . "

<https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAHOOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"... After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

FURTHERMORE: "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

#### ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats."

<https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%20Nearly%2085%20percent,pipe,line%20spills%2C%20sands%20a%20news>

The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershedpheds.org.au/blog/the-impact-of-stormwater-car-emissions/>

NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keaouhou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

## LEARN FROM OTHERS:

### RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keaouhou Bay. If it's being drastically hurt by runoff water from developments, Keaouhou Bay waters won't stand a chance if development above the bay is allowed. Keaouhou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keaouhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keaouhou Bay due to its size and fragility.

### MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keaouhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

55

### It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide..."

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off). " <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,hard%20catastrophic%20impacts%20state%20wide.>

This article is by the Coral Reef Alliance here in Hawaii. "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawai%CA%BBi%20reefs%20face%20major%20global,into%20Hawai%CA%BBi%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keaouhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

56

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species."

<https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=impacts%20from%20land%2Dbased%20sources.and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead.services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments.organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments.organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments Kill Marine Life

This article by MarinBio states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem...."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBio. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to.light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.egge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.egge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted. The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitor-s-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant destruction of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development/#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built, and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20gr eater,%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites->

<https://www.sciencemag.org/doi/10.1126/science.1200000>#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%20are%20new%20stud y%20said.

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management."

[https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaHjAnWAg453RgN0AJWei9jnR3oTv0PyGZA5ic\\_H001zeHNIP3ASnhcgkRy6\\_vKLPw49dbmBYoXsg3Y1MgQIGBZsapdGUH7O1Slbu9x5Pr3xED4Kx14TosJlvgQ1a7ZRR3UbraxpodJd2a0nLSmW5uxB7JfEDpJ8OGJpx7J1TWdGtXFKJZYeNdcJssw\\_dnaUg5ZlhcjPBDImmaH15yq15IQ%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaHjAnWAg453RgN0AJWei9jnR3oTv0PyGZA5ic_H001zeHNIP3ASnhcgkRy6_vKLPw49dbmBYoXsg3Y1MgQIGBZsapdGUH7O1Slbu9x5Pr3xED4Kx14TosJlvgQ1a7ZRR3UbraxpodJd2a0nLSmW5uxB7JfEDpJ8OGJpx7J1TWdGtXFKJZYeNdcJssw_dnaUg5ZlhcjPBDImmaH15yq15IQ%3D&tracking_referrer=abcnews.go.com)

## INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste each year. " <https://www.homebigogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keauhou Bay. On Hawaii's Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawaii's landfill

September 17, 2023

The West Hawaii's Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawaii's landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill>

A County commission drafts ordinance aiming to ban recyclables at West Hawaii's landfill

By Megan Moseley September 6, 2023

Hawaii's County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawaii's County Director of Environmental Management, told commissioners the West Hawaii's Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill>

Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawaii's government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, result in

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keauhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keaouhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.

#### ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

#### FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED

The green sea turtle is federally protected and can be seen in Keaouhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Allowing this development WILL POLLUTE Keaouhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keaouhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawaii are protected by the Endangered Species Act (ESA) and additionally protected by Hawaii's Revised Statutes Chapter 195D (HRS) and Hawaii's Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

#### THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keaouhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keaouhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keaouhou Bay will likely be changed forever.

This information is from a NOAA Scientist; "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a

'selfie!'" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-try-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keauhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keauhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keauhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hiscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hiscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hiscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hiscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project.

## GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "

Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single%20charge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single%20charge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epp/files/2013/09/Stormwater-MS4-Presentation-HEE-7.15.14.pdf> where the Hawai'i government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keauhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

## ALGAE BLOOMS KILL CORAL AND MARINE LIFE

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution. . ."

<https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"... After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

FURTHERMORE: "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

## ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats."

<https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20saves%20a%20new>

The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershepherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

#### NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

#### How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SUCJBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

#### LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

#### MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii". Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts statewide...

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban runoff). " <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,had%20catastrophic%20impacts%20state%2Dwide>.

This article is by the Coral Reef Alliance here in Hawaii. "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawai%CA%BBi%20reefs%20face%20major%20global,into%20Hawai%CA%BBi%20waterways%20every%20day>.

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral

reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development."

[https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban runoff, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii". <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species>.

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide>.

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral."

[https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)"

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival"  
[https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments Kill Marine Life

This article by MarinBio states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem...."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBio.  
<https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as

sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.age.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.age.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

#### HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal->



September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill

By Megan Moseley September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, result in

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keaouhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.

#### ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

#### FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED

The green sea turtle is federally protected and can be seen in Keauhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Allowing this development WILL POLLUTE Keauhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keauhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

79

#### THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keauhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keauhou Bay will likely be changed forever.

This information is from a NOAA Scientist; "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cy-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keauhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keauhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keauhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

80

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hirscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hirscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hirscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hirscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project.

#### GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "

Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:-:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:-:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keauhou Bay because this tread land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/po/files/2013/09/Stormwater-MS4-Presentation-HEE-7.15.14.pdf> where the Hawaii government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keauhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

#### ALGAE BLOOMS KILL CORAL AND MARINE LIFE

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution. . ." <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20sa ys%20a%20new>

The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwaterishepheids.org.au/blog/the-impact-of-stormwater-car-emissions/>

NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keaouhou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keaouhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

FURTHERMORE: "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keaouhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keaouhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keaouhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats."

<https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20moto r%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

#### LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow...

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

#### MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawai'i. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts statewide...

This was the third major bleaching episode in Hawai'i over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human

impacts (sewage effluent and urban runoff). " <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,had%20catastrophic%20impacts%20state%20wide>.

This article is by the Coral Reef Alliance here in Hawaii. "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawai%20reefs%20face%20major%20global,into%20Hawai%20CA%20BBIs%20waterways%20every%20day>.

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, falling sewage systems, unpaved roads, farms, land clearing, and development."

[https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban runoff, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii."

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat>

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species."

<https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species>.

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,ervices%20that%20coral%20reefs%20provide>.

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral."

[https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals).

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days).

It's Been Proven Resort Developments KILL Marine Life

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO.  
<https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to%20light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

#### HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted. The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant destruction of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed.  
<https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20gr eater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the

shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%20%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20stud y%20said.>

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaiHjJAnWAg453RgN0JAiWei9inR3oIv0PYGZA5ic\\_H0Q1zcHNIP3ASnhcgKRy6\\_vKLpW49dbmBYoXSg3Y1MgQIGBZsapidGUH1701SIbuw9x5Pr3xED4kxI4I0sIvgQ1a7ZRR3UbraxpodJ42AoNISMwSuxB7JEDdplj8OGJpx71TIWdCfXvFKIzYeNdcJ3Ssw\\_dnaUjg5IZIhejPBDImmaH5yqI5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaiHjJAnWAg453RgN0JAiWei9inR3oIv0PYGZA5ic_H0Q1zcHNIP3ASnhcgKRy6_vKLpW49dbmBYoXSg3Y1MgQIGBZsapidGUH1701SIbuw9x5Pr3xED4kxI4I0sIvgQ1a7ZRR3UbraxpodJ42AoNISMwSuxB7JEDdplj8OGJpx71TIWdCfXvFKIzYeNdcJ3Ssw_dnaUjg5IZIhejPBDImmaH5yqI5Q%3D&tracking_referrer=abcnews.go.com)

## INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste each year." <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keaunohu Bay. On Hawai'i Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill

September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill

By Megan Moseley September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikoloa.

“Trying to site a new landfill is close to impossible,” Adams said. “So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill.”

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to “divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste.”

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill>

Time's Up For Landfills

‘Gentle’ demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, result in

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keaouhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.

#### ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/andangered-species-conservation/andangered-species-act>

#### FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED

The green sea turtle is federally protected and can be seen in Keaouhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According

to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Allowing this development WILL POLLUTE Keauhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keauhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

#### THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keauhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keauhou Bay will likely be changed forever.

This information is from a NOAA Scientist; "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keauhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keauhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keauhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§ 195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project.

#### GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/eppo/files/2013/09/Stormwater-MS4-Presentation-HEE-7.15.14.pdf> where the Hawaii government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keauhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

#### ALGAE BLOOMS KILL CORAL AND MARINE LIFE

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution. . . . " <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

FURTHERMORE: "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

#### ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust  
<https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

(likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats."

<https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20saves%20a%20new>

The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershedpartners.org.au/blog/the-impact-of-stormwater-car-emissions/>

NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

#### LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

#### MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawai'i. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide..."

This was the third major bleaching episode in Hawai'i over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban runoff). " <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,hard%20catastrophic%20impacts%20state%20wide.>

This article is by the Coral Reef Alliance here in Hawai'i. "An ecosystem under threat Hawai'i's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawai%20reefs%20face%20major%20global,into%20Hawai%20CA%20BBIs%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban runoff, may be exacerbated under high thermal stress. In light of the forecasted

increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii".  
<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species."

<https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=impacts%20from%20land%2Dbased%20sources.and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide."  
<https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead.services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral."  
[https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival"  
[https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments.into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments.into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO.  
<https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to%20light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: Industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.ajge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.ajge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keaouhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National Center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20gr eater,%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,share%20are%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%20are%20new%20stud y%20said.>

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management."

## HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant destruction of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development/#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20ent ire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keaouhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the

[https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaHhJAnWAq453rRgN0IAIWei9inR3oTlv0PvGzA5lc\\_H0Q1zeHNIP3ASnhcgKRy6\\_vKLpW49dbmBYoXSg3Y1MgQIGBZsapdGJH17O1SI\\_bu9x5Pr3xED4KxI4IOsIvgQ1a7ZRR3UbraxpodJd2AoNiSmW5uxBZJJEDdplj8OGJpx71TlWqCfXvKJlZVeNdcj3Ssw\\_dnaUjg5IzhejPBDImmaH15yq15Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaHhJAnWAq453rRgN0IAIWei9inR3oTlv0PvGzA5lc_H0Q1zeHNIP3ASnhcgKRy6_vKLpW49dbmBYoXSg3Y1MgQIGBZsapdGJH17O1SI_bu9x5Pr3xED4KxI4IOsIvgQ1a7ZRR3UbraxpodJd2AoNiSmW5uxBZJJEDdplj8OGJpx71TlWqCfXvKJlZVeNdcj3Ssw_dnaUjg5IzhejPBDImmaH15yq15Q%3D&tracking_referrer=abcnews.go.com)

#### INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste each year. " <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keauhou Bay. On Hawaii's Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawaii's landfill

September 17, 2023

The West Hawaii's Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawaii's landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill>

A County commission drafts ordinance aiming to ban recyclables at West Hawaii's landfill

By Megan Moseley September 6, 2023

Hawaii's County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawaii's County Director of Environmental Management, told commissioners the West Hawaii's Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill>

Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawaii's government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resultin

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**From:** keauhoubay <keauhoubay@ksbe.edu>  
**Sent:** Tuesday, August 6, 2024 11:09 AM  
**To:** Jason Rigmaiden  
**Cc:** planning@hawaiicounty.gov; 221053-01 KS Keaouhou Entitlements  
**Subject:** Re: [EXTERNAL] Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT

**Categories:** Yellow Category

Aloha e Jason,

Thank you for your comments concerning the Keaouhou Bay Management Plan, Draft Environmental Impact Statement. Your comments have been received and administratively recorded.

Comments received during the 45-day public comment period will be reproduced in the Final Environmental Impact Statement, and substantive comments addressed.

The County of Hawai'i and our planning consultant, G70, are copied here on this email so that they receive a copy of your feedback.

We appreciate your involvement and contribution to the environmental review process. Your input is invaluable in helping us develop a management plan that reflects the needs and concerns of our community.

Thank you once again for your engagement and commitment to the future of Keaouhou Bay.

Mahalo,

The Keaouhou Bay Project Team

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**From:** Jason Rigmaiden  
**Sent:** Monday, August 5, 2024 2:43 PM  
**To:** keauhoubay <keauhoubay@ksbe.edu>  
**Subject:** [EXTERNAL] Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT

**CAUTION: This email is from an outside sender. Do not click on links or open attachments unless you recognize the sender and know the content is safe.**

To Whom it May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keaouhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.  
Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.

#### ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

#### Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-act>

#### FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED

The green sea turtle is federally protected and can be seen in Keaouhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Allowing this development WILL POLLUTE Keaouhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!) states this fact clearly. Keaouhou Bay is home to countless sea creatures such as the protected green sea turtle,

spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawaii are protected by the [Endangered Species Act \(ESA\)](#) and additionally protected by [Hawaii Revised Statutes Chapter 195D \(HRS\)](#) and [Hawaii Administrative Rules \(HAR\) 13-124](#)." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

#### THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keaouhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keaouhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keaouhou Bay will likely be changed forever.

This information is from a NOAA Scientist, "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered [Hawaiian monk seals](#). They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the [Marine Mammal Protection Act \(MMPA\)](#), as well as locally by Hawaii Revised Statutes (HRS) [Chapter 195D](#) and Hawaii Administrative Rules (HAR) [13-124](#)." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keaouhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keaouhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve", would be to protect the land around Keaouhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keaouhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrs/current/vol03\\_ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/vol03_ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HR0195D/HR0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HR0195D/HR0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project.

#### GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses [approximately 50 pesticide active ingredients](#), including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "

Most drains have a single large exit at their point of discharge (often covered by a [grating](#)) into a [canal](#), river, lake, [reservoir](#), sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dr%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dr%20wells)

The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEE-7.15.14.pdf> where the Hawaii government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keauhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

#### ALGAE BLOOMS KILL CORAL AND MARINE LIFE

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer. When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms. Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development.. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution..

" <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/> If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient

enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

FURTHERMORE: "if there are [toxic algal blooms](#), like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

#### ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots.

Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming

fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.htm#:~:text=Millions%20of%20motor%20vehicle%20Denaines.Dirt%20can%20be%20a%20pollutant.>

[Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects](#)

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a [new report](#) from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearlv%20Nearlv%20percent.pipline%20spills%2C%20says%20a%20new>

The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershed.org.au/blog/the-impact-of-stormwater-car-emissions/>

NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keaouhou Bay during development?  
Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation

Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic

Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are.effect%20on%20nearshore%20fish%20populations.>

What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

LEARN FROM OTHERS:

RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keaouhou Bay. If it's being drastically hurt by runoff water from developments, Keaouhou Bay waters won't stand a chance if development above the bay is allowed. Keaouhou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow...

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keaouhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams... Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20caring%20pollutants%20that%20harm,them%20are%20placed%20in%20leopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keaouhou Bay due to its size and fragility.

MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keaouhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii". Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide...

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off). <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event>

<https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event>

<https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event>

This article is by the Coral Reef Alliance here in Hawaii. "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawai%CA%BBi%20reefs%20face%20major%20global,into%20Hawai%CA%BBi%20waterways%20every%20day>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0>

<https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother

coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=Th is%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=Th is%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text= This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text= This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days)

It's Been Proven Resort Developments KILL Marine Life

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science. "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon. The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire

experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another

question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation." [https://scope.dge.carnegiescience.edu/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keaouhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

#### HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development/#~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20a,nitre%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keaouhou Bay. Human traffic WILL seriously increase if this

resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs  
If a Bungalow Resort is allowed to be built in Keaouhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National Center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#~:text=The%20less%20people%20at%20a,there%20are%20C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20study%20said.>

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science

Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakqQNhJhJAnWaq453tRqN0AJwE9jnR3oTv0PVGzA5lc\\_H001zgHNIP](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakqQNhJhJAnWaq453tRqN0AJwE9jnR3oTv0PVGzA5lc_H001zgHNIP)

[3ASnhcdKRY6\\_vKLpW49dbmBYoXSq3Y1MgQicBZsappdGUJH7O1SLbu9x5P3xED4Kx14T0s.lvcQ01a72ZRt3UbraxpodJq2AoNIsmWsuXb7JIEDdpJ8OGJpx71TJW6CfXvFKJIZYvE9cJ3Sw\\_dnaUg5ZlHcjPBDlmmaH15vqT5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.abcnews.go.com/US/story?id=11594159&cid=tracking_referrer)

## INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste each year." <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keauhou Bay. On Hawaii Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawaii landfill

September 17, 2023

The West Hawaii Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawaii landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

A County commission drafts ordinance aiming to ban recyclables at West Hawaii landfill

By [Megan Moseley](#) September 6, 2023

Hawaii County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawaii County Director of Environmental Management, told commissioners the West Hawaii Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump.

Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not

limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawaii's government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

Drought Conditions On Hawaii Island Prompt Water Supply Message

by Big Island Video News

on Oct 5, 2023 at 3:59 pm

(BIVN) — With moderate to severe drought conditions being reported across Hawaii Island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawaii Island is under "Moderate Drought" conditions, according to the latest

information from the [U.S. Drought Monitor](#). There is an area under "Abnormally Dry" conditions in

South Kona, however there are other, small pockets on the Big Island that are under "Severe

Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawaii County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawaii%CA%BB-island-prompt-water-supply-message/>

[U.S.](#)

Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By [Li Cohen](#)

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to significant droughts, and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the world's largest surfing wave pool opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group Oahu Water Protectors. "... We are on the verge of a greater catastrophe."

"We are in a water crisis, that has to be made very clear," Wayne Tanaka, director of Sierra Club of

Hawaii, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

UPDATE: HELCO asks for continued energy conservation  
BY SPECTRUM NEWS STAFF HAWAII ISLAND  
UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024  
HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.  
In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity us is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumbroadcast.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

Big power supply problems continue to plague Hawaii Island  
Apr. 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April  
BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumbroadcast.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES

A Resort Development Will Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawaii News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state. This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added. <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/langry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: All of these roads only have two lanes!

There are two developments already on Alii Drive being built as of today: and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested. These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly. In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8373ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8373ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FQSnPDii8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

**MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC AND WASTEWATER:**

1) Hawaii Deals with Burgeoning Waste Management Problem  
As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawaii Sanitary Landfill reaching capacity.

The West Hawaii Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawaii Public Radio Published January 9, 2020 at 5:00 AM HST  
"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrlocalnews.com/hilo/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables->

5) "The overwhelming plastic waste Hawaii visitors leave behind By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A County commission drafts ordinance aiming to ban recyclables at West Hawaii landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawaii County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawaii Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca-bi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealahou sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs. Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi

Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island

without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/helco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island

February 13, 2024 · 5:23 PM HST

\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) HELCO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling

outages for Big Island after several large generators became unavailable and reduced output

Tuesday night."

<https://www.khon2.com/local-news/helco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii Public

Radio | By Savannah Harriman-Pole

Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii Island have advised customers to conserve water ahead of

possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawika Uyehara,

deputy director of Hawaii County's Department of Water

Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only

sums up what it means to exist on an island, but what it means to live, period. But now, one of the

largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) News Hawaii County issues mandatory 25% water restriction for North Kona

August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawaii Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News

on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawaii, the Hawaii County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-CA-BI-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power

Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help

with power issues on the island.

19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand." [https://www.reddit.com/r/BigIsland/comments/1bnuat3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?rl=52660](https://www.reddit.com/r/BigIsland/comments/1bnuat3/hawaiian_electric_is_reporting_that_several_large/?rl=52660)

20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing

mechanical problems resulting in a reduced output. The largest generator, an independent power

producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts

on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and

infrastructure on an island already struggling. There are years of new development that have already

been approved but not completed. It is not responsible or prudent to continue to develop this resort

under these current conditions.

HISTORICAL AND CULTURAL SIGNIFICANCE:

The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that

the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his

foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his

paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned

compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of

the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this

law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.  
The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawaii. After being added back in 1978, the law is part of Hawaii's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect
- "We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

The Law of the Splintered Paddle is also on Kamehameha Schools website. The historical value of this law should be enough to help make Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-true-200-years-after>

Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.

#### IN CONCLUSION

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keauhou Bay and "The Endangered Species Act of 1973 (ESA or "The Act"; 16 U.S.C. § 1531 et seq.) is the primary law in the United States for protecting and conserving imperiled species. Designed to protect critically imperiled species from **extinction** as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President **Richard Nixon** on December 28, 1973. The **Supreme Court of the United States** described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation".<sup>[1]</sup> [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)  
This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other. This land MUST be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come. In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved. These issues MUST be solved before considering another resort development on Big Island. We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is NOT suitable for this kind of development for both environmental and infrastructure reasons.  
The cost of what stands to be lost is far too high to allow this to happen.  
Please save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.  
Mahalo,

Jason Rigmaiden  
This message is the property of Kamehameha Schools and any attachments are confidential to the intended recipient at the e-mail address to which it has been addressed. If you are not the intended recipient, you may not copy, forward, disclose or use any part of this message or its attachments. If you received this transmission in error please notify the sender immediately by e-mail or contact Kamehameha Schools at webmaster@ksbe.edu and then delete this message from your system.

**From:** Jason Rigmaiden <[REDACTED]>  
**Sent:** Monday, August 5, 2024 2:44 PM  
**To:** 221053-01 KS, Keaouhou Entitlements  
**Subject:** Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT  
**Categories:** Yellow Category

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keaouhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.

#### ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

#### FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED

The green sea turtle is federally protected and can be seen in Keaouhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Allowing this development WILL POLLUTE Keaouhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!) states this fact clearly. Keaouhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawaii are protected by the Endangered Species Act (ESA) and additionally protected by Hawaii Revised Statutes Chapter 195D (HRS) and Hawaii Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

## THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keaouhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keaouhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keaouhou Bay will likely be changed forever.

This information is from a NOAA Scientist, "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie!'" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a [recent study](#), NOAA scientists used social media to monitor human activities around endangered [Hawaiian monk seals](#). They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-civ-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the [Marine Mammal Protection Act \(MMPA\)](#), as well as locally by Hawai'i Revised Statutes (HRS) [Chapter 195D](#) and Hawai'i Administrative Rules (HAR) [13-124](#)." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keaouhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keaouhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keaouhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keaouhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems,

and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hsrcurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hsrcurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm).

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hsrcurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hsrcurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keaouhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keaouhou Bay and the surrounding area during the building phase of this enormous project.

## GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keaouhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "Most drains have a single large exit at their point of discharge (often covered by a grating) into a [canal](#), river, lake, [reservoir](#), sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,disharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,disharge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keaouhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keaouhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where the Hawai'i government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keaouhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keaouhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

#### ALGAE BLOOMS KILL CORAL AND MARINE LIFE

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development..The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution.."  
"<https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

FURTHERMORE: "If there are [toxic algal blooms](#), like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

#### ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife

habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a [new report](#) from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others

should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20Osavs%20a%20new>

#### The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershepherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

#### NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

#### How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dnh.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

#### What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

#### LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keauhou Bay, if it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams... Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20leopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

#### MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii". Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide...

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off). <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,had%20catastrophic%20impacts%20state%20wide.>

This article is by the Coral Reef Alliance here in Hawaii. "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawaii%20reefs%20face%20major%20global,into%20Hawaii%20CA%20BBi's%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing

sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is: "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%20based%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother

coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water..." (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living

matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.camegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.camegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many livelihoods from locals on the island who depend on the manta ray tour for their income.

HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,fo%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%20%20a%20new%20study%20said.>

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science

Direct <https://www.scienceirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?shating\\_token=wsakcQNhahJiAnWaq453RqNOAWel9mR3ZoTv0PVzGA5lc\\_HOO1zcHNIP3AShtcGRy6\\_vKLPw49dbrmBYoX5g3Y1MgQlGBZsabdGUH7O1SLbu9x5P3XED4Kx4T0sJlvqQ1a72Zr3rUbraxpodJq2AoNlSmWSuxB7JIEDdpj8OGJpx71TJWqCfXvFKJlZYeNdcJ3Sw\\_dnaUq5ZlhqIPBDImmaH15yqT5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?shating_token=wsakcQNhahJiAnWaq453RqNOAWel9mR3ZoTv0PVzGA5lc_HOO1zcHNIP3AShtcGRy6_vKLPw49dbrmBYoX5g3Y1MgQlGBZsabdGUH7O1SLbu9x5P3XED4Kx4T0sJlvqQ1a72Zr3rUbraxpodJq2AoNlSmWSuxB7JIEDdpj8OGJpx71TJWqCfXvFKJlZYeNdcJ3Sw_dnaUq5ZlhqIPBDImmaH15yqT5Q%3D&tracking_referrer=abcnews.go.com)

INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste each year." <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keauhou Bay. On Hawaii Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawaii landfill

September 17, 2023

The West Hawaii Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill

By [Megan Moseley](#) September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

Drought Conditions On Hawai'i Island Prompt Water Supply Message

by Big Island Video News  
on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information [from the U.S. Drought Monitor](#). There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawai%CA%BBi-island-prompt-water-supply-message/>

[U.S.](#)

Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By [Li Cohen](#)

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to [significant droughts](#), and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the [world's largest surfing wave pool](#) opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group Oahu Water Protectors. "... We are on the verge of a greater catastrophe."

"We are in a [water crisis](#), that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawaii, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

UPDATE: HELCO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity use is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/hcco-customers-on-hawaii-island-asked-to-conserve-power->

Big power supply problems continue to plague Hawaii Island

17

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES

18

A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawaii News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state. This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added. <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: All of these roads only have two lanes!

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FQSnPDii8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

#### **MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC and WASTEWATER:**

- 1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem/>

- 2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

- 3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

- 4)"What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community

support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

- 5) "The overwhelming plastic waste Hawaii visitors leave behind By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

- 6) "A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawaii County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

- 7) "Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

- 8) "Hawaii Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca-bi-under-severe-drought/>

- 9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

- 10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawai'i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawai'i Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs, Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST \* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) HELCO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawika Uyehara, deputy director of Hawaii County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) News Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawaii Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawaii, the Hawaii County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-CA%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/)

20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

#### HISTORICAL AND CULTURAL SIGNIFICANCE:

The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawaii. After being added back in 1978, the law is part of Hawaii's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

The Law of the Splintered Paddle is also on Kamehameha Schools website. The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-rmq-true-200-years-after-k>

Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.

#### IN CONCLUSION

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keauhou Bay and "The Endangered Species Act of 1973 (ESA or "The Act"; 16 U.S.C. § 1531 et seq.) is the primary law in the United States for protecting and conserving imperiled species.

Designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President Richard Nixon on December 28, 1973. The Supreme Court of the United States described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation".<sup>[1]</sup> [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other. This land MUST be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come.

In addition to the natural disaster this will cause, Hawaii Island is already having serious infrastructure and resource issues that have yet to be solved. These issues MUST be solved before considering another resort development on Big Island.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is NOT suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen.

Please save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.

Mahalo,

Jason Rigmaiden

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**From:** Claudia Rohr <[REDACTED]>  
**Sent:** Wednesday, August 7, 2024 12:22 PM  
**To:** 221053-01 KS Keaouhou Entitlements; Alex Roy  
**Subject:** Keaouhou Bay DEIS

**Categories:** Yellow Category

Regarding Keaouhou Bay DEIS

My questions are as follows:

1. Will He'eia Bay be accessed through this project area? How?
2. Has KS limited lateral access along the shoreline to He'eia Bay by hardening the shoreline with rocks? Please provide the permits and approvals for that.
3. Will public vehicular and parking access to He'eia Bay be provided through this project area?
4. Please explain the authority in the trust documents for KS to develop a hotel project to maximize profits at a major royal cultural site? Are there no impermissible business strategies in the KS 2025 strategic plan?
5. How will King Kamehameha's slide be restored and celebrated?
6. How will this great royal cultural center as a whole be celebrated and communicated to future generations?
7. As an alternative to a resort hotel, can't you monetize a royal cultural center designed to educate the public, children, tourists in a culturally and environmentally sensitive way and that would provide cultural jobs as opposed to housekeeping jobs?
8. Where is the certified shoreline survey, a prerequisite to applying for a SMA permit and shoreline setback variance? Why is it not included in this DEIS?
9. Will you be seeking to purchase easements through the OCCL and BLNR for those structures encroaching onto state land in the conservation district, and when?
10. Please describe everything to be covered in the shoreline setback variance?
11. Please list, locate, and describe *all of KS's* proposed cultural and educational uses, activities, and programs for its students and charter school Hamana for the project area that must be included in any assessment application? Please show where these uses and activities are permit as a matter of right in the zoning code. Or do you intend to apply for a use permit concurrent with the SMA permit?
12. Please list, locate, and describe all of KS's contemplated cultural and educational uses, activities, and programs for the He'eia Bay property that will require an assessment application? Please show where these uses and activities are permit as a matter of right in the zoning code. Or do you intend to apply for a use permit concurrent with the SMA permit?
13. Please explain and justify why the He'eia Bay property management plan is not potentially illegally segmented from this DEIS?
14. Are you going to be building school facilities in the project area?
15. What will the school facilities consist of?
16. Will there be overnight facilities or camping as part of the school facilities? Please discuss and describe them.
17. Will open fires and imu be allowed in this project area? **Please discuss fire roads and availability of fire service.**

18. What public uses will be displaced by school facilities and/or uses in this project area and at the He'eia Bay property?

19. What are the grubbing permit numbers for the grubbing of the historic trails for the survey work?
20. Does KS intend to develop a separate wildlife conservation management plan? Why not?
21. How many workers do you foresee employing?
22. How many workforce housing units do you intend to build as part of this project?
23. Why do you need section 404 and 10 permits from the Army Corps of engineers?
24. Where are you filling or dredging or replacing wetlands?
25. What percentage of the wetlands are you filling or dredging or replacing?
26. Where do you intend to replace with new wetlands?
27. Are there any open ACE permits. Provide permit numbers, please.
28. How do you intend to protect/avoid disruption of the spring in the upland grading work?

Please acknowledge receipt of these questions as part of the DEIS process. Thank you,

Claudia Rohr  
Big Island resident

[REDACTED]  
Sent from my iPad

## Kathy Roney

The 5th Grade Class of Kamehameha Schools Kapalama put on a moving production calling out the cost of tourism reliance, on our water, on our land and our community and the need for change.

At 70 years old and a former resident of Keaouhou Bay, I've seen decisions made by Kamehameha Schools adversely effect our water, our land, sacred and culturally significant sites, and our community not only islands wide but especially throughout the Kahalu'u/Keaouhou Corridor.

While many will respond with citations to scientific studies as suggested, I must speak my concerns about our personal responsibility to our keiki and the wise words of concern they have voiced.

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**From:** True Level Health <[REDACTED]>  
**Sent:** Tuesday, August 6, 2024 12:01 PM  
**To:** 221053-01 KS Keaouhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keaouhoubay@ksbe.edu  
**Subject:** Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT!  
**Categories:** Yellow Category

To whom it may concern,

Please reject Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keaouhou Bay.

Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "*What is the biggest source of pollution in the ocean?*" by NOAA, National Oceanic and Atmospheric Administration, states, "*When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides.*" It also states, "*Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff.*"

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "*Putting the Earth in Play: Environmental Awareness and Sports,*" shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keaouhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endangered these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,  
Christianne van Rooij

Ambika Rose

Dear Sirs & Madams:  
GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshingolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keaouhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia: "

Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single%20large%20exit,individual%20dr%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single%20large%20exit,individual%20dr%20wells)

The pavement from this development will cause pollution to runoff into Keaouhou Bay because this treed land that will become a housing development is directly behind the golf course and the Bay. This means that runoff from the pollution from the golf course will go straight into the BAY. ONLY PROTECTION POLLUTION FILTER Keaouhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epw/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where the Hawaii's government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keaouhou Bay and for these endangered species habitat.

The cost of what stands to be lost is far too high to allow this development to happen.

Please save Keaouhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.

Mahalo,

Ambika Rose

**From:** Ambika <[REDACTED]>  
**Sent:** Tuesday, July 23, 2024 5:04 PM  
**To:** 221053-01 KS Keauhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keauhoubay@ksbe.edu  
**Subject:** Against bungalow development at Keauhou. Golf course pollution.

**Categories:** Green Category

Dear Sirs & Madams:

### GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "  
Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20wells)

The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where the Hawaii government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.

The cost of what stands to be lost is far too high to allow this development to happen.

Please save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.

Mahalo,

Sent from my iPhone

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**From:** keahoubay <keahoubay@ksbe.edu>  
**Sent:** Monday, August 12, 2024 9:28 AM  
**To:** Shannon Rudolph  
**Cc:** 221053-01 KS Keahou Entitlements  
**Subject:** Re: [EXTERNAL] Please don't assault Keahou Bay - No condos/commercial areas

Yellow Category

Aloha e Shannon,

Thank you for submitting your comments regarding the Draft Environmental Impact Statement (DEIS) for the Keahou Bay Management Plan. We appreciate your engagement in this important environmental review process.

Please be advised that we have received and administratively recorded. However, it is important to note that your submission was made after the closure of the official 45-day comment period (August 7) as outlined in the Hawaii Administrative Rules 11-200.1-25 (Public Review Requirements for Draft Environmental Impact Statements). Consequently, comments received outside this designated period are not required to be addressed or considered in the final decision-making process.

However, Kamehameha Schools, as the Applicant, values all feedback and may choose to consider the validity, significance, and relevance of any substantive comments provided as it pertains to the scope, analysis, and process of this DEIS.

Thank you once again for your participation.

Mahalo,

The Keahou Bay Project Team

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**From:** Shannon Rudolph  
**Sent:** Thursday, August 8, 2024 5:38 AM  
**Subject:** [EXTERNAL] Please don't assault Keahou Bay - No condos/commercial areas

**CAUTION: This email is from an outside sender. Do not click on links or open attachments unless you recognize the sender and know the content is safe.**

To Whom It May Concern,  
Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keahou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keahou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keahou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keahou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.

#### ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keahou Bay.

The Green Sea Turtle swims in Keahou Bay weekly and the monk seal has also been seen swimming and resting in Keahou Bay. Both of these marine animals are on the endangered species list.

#### Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.— The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

#### FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED

The green sea turtle is federally protected and can be seen in Keahou Bay weekly.

The following article that states: "**POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES**"

**Why does Hawaii have a runoff problem?**

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

**Allowing this development WILL POLLUTE Keauhou Bay.** The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!) states this fact clearly. Keauhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because **developments have been shown to ALWAYS pollute the water is that is nearby.**

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawaii are protected by the Endangered Species Act (ESA) and additionally protected by Hawaii Revised Statutes Chapter 195D (HRS) and Hawaii Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

**THE ENDANGERED MONK SEAL WILL BE AFFECTED**

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keauhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

**Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keauhou Bay will likely be changed forever.**

This information is from a NOAA Scientist: "**Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'!**" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawaii Revised Statutes (HRS) Chapter 195D and Hawaii Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

**Keauhou Bay is the monk seals and the green sea turtle's habitat.** Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. **By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.**

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keauhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

**Does this EIS have any reports on the endangered species that frequent Keauhou Bay? This is their habitat and it needs to be "conserved".**

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management,

and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HR50195D/HR5\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HR50195D/HR5_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HR50195D/HR5\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HR50195D/HR5_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project.

#### **GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS**

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use."

<https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable! Please read from Wikipedia, "

Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER

Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where the Hawaii' government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keauhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

#### **ALGAE BLOOMS KILL CORAL AND MARINE LIFE**

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

**Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.**

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

**Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?**

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's

titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development.. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution.. " <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases.." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

**Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?**

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

**FURTHERMORE:** "If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

## ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

**Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?**

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies

have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

**The article below is from NOAA regarding motor vehicle engines and pollution to the sea.**

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats."

<https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

**Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects**

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments.

<https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20says%20a%20new>

## The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways."

<https://www.stormwatershepherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

## **NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE**

**Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?**

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust

<https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

## **How Does Noise Pollution Harm Marine Species?**

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and,

"Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

## **What is ocean noise?**

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean. Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid

predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

## **LEARN FROM OTHERS:**

### **RUN-OFF FROM DEVELOPMENT KILLS**

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a **lot bigger** than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

**This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states,** "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay

and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,the%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

### **MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN**

**Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?**

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

#### **It's Been Proven Developments Severely Pollute Nearby Waters**

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawai'i. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide..."

This was the third major bleaching episode in Hawai'i over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off). " <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20Bleaching%20is%20Occurring%20more,head%20catastrophic%20impacts%20state%20wide.>

**This article is by the Coral Reef Alliance here in Hawai'i.** "An ecosystem under threat Hawai'i's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawai%CA%BBi's%20reefs%20face%20major%20global,into%20Hawai%CA%BBi's%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development."

[https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

**We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress.** In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawai'i."

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawai'i has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

**"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.**

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates

<https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

**"Impacts from land-based sources of pollution including coastal**

**development, . . . can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species."** <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "**Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide.**" <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead%20services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. **Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.**"

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "**Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)**"

**Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival"** [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

**It's Been Proven Resort Developments KILL Marine Life**  
This article by MarinBIO states, "**Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change.** Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light,

and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem...

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. **This occurred in a relatively short time considering that the experiment lasted less than three weeks.** The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

**The ecosystem is fragile and interconnected as is stated in this article:**  
"Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by

MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to%20light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "**Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage.** Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in

biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation." [https://scope.dge.carnegiescience.edu/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

**HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH**  
**Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?**

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: **The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life.**" <https://www.ironman.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

**Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.**

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through runoff of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the runoff of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for

photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. **Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it.** Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkelling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

**It's Been Proven an Increase in Human Population Destroys Coral Reefs**

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. **"Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs.** Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information

PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, **"This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found.** The millions of tourists who flock to the shores of Hawaii every

year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature

Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who%20will%20live%20new%20study%20said>

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

**"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction.** Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,t%20more%20runoff%20and%20siltation>.

Another article by Nature Sustainability, **"Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity.** By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, **coral reefs both attract and suffer from coastal tourism.** Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaJhjJAnWAg453tRgN0jAjWl9jnR3ZoTv0PyGzA5Jc_H001zcHNIP3ASnhcgKRy6_vKLpW49dbmBYoX5g3YIMgQIGBZsapdGUH7O15Lbu9x5Pr3xED4KxI4T0sJlvqQ1a72ZRT3rUbraxpodJd2AoNlSmW5uxB7JjEDdpJj8OGJpX71TJWdCFxvFKJIZjYeNdcJj35w_dnaUg5lZlhcjPBBDImmaH15ygT5Q%3D&tracking_referrer=abcnews.go.com)

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## INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

**Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?**

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

**Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?**

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. **Worldwide, hotels produce almost 300,000 tonnes of waste each year.**" <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keaouhou Bay. On Hawaii's Island, we are already struggling to meet the increasing need for resources and infrastructure.

**Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawaii's landfill**

September 17, 2023

The West Hawaii Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawaii landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

**A County commission drafts ordinance aiming to ban recyclables at West Hawaii's landfill**

By Megan Moseley September 6, 2023

Hawaii County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawaii County Director of Environmental Management, told commissioners the West Hawaii Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Kaahumanu Highway in Waiakōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

### **Time's Up For Landfills**

'Gentle' demolition strategies can help preserve resources  
PAULA BENDER April 2, 2024

As Hawaii government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills. Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near

airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.  
<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

### **Drought Conditions On Hawaii Island Prompt Water Supply Message**

by Big Island Video News  
on Oct 5, 2023 at 3:59 pm

(BIVN) - With moderate to severe drought conditions being reported across Hawaii island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawaii island is under "Moderate Drought" conditions, according to the latest information from the U.S. Drought Monitor. There is an area under

"Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawaii County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

### **From a Water Supply news release:**

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawaii-CA%BBi-island-prompt-water-supply-message/>  
U.S.

**Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to significant droughts, and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the world's largest surfing wave pool opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a

member of advocacy group O'ahu Water Protectors. " ... We are on the verge of a greater catastrophe."

**"We are in a water crisis, that has to be made very clear,"** Wayne Tanaka, director of Sierra Club of Hawai'i, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>  
Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

#### **UPDATE: HELCO asks for continued energy conservation**

BY SPECTRUM NEWS STAFF HAWAII ISLAND  
UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024  
HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity use is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

**Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.**

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply. The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

#### **Big power supply problems continue to plague Hawaii Island**

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m. **The company explained that it faces an "extremely tight" supply of power at peak use periods,** especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

#### **Hawaii Island customers urged to reduce electricity use through April**

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

**-If there is not enough electricity to meet demand,** Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

### **FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?**

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development. The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges. The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawai'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems.

<https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "**Hawaii Island has most traffic fatalities in state**. This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

**"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here,"** he added."

<https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

**The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.** Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an [emergency order shutting down Waipio Valley Road](#) due to overuse and poor prior maintenance." This is happening all over Big

Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: **All of these roads only have two lanes!**

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava

evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii

Dr. <https://www.youtube.com/watch?v=-FQ5snPBjI8>

**Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.**

**Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:**

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

**"That's just Big Island traffic,"** is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

**MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC AND WASTEWATER:**

**1) Hawaii Deals with Burgeoning Waste Management Problem**

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020 "Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled."

<https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

**2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawaii's Sanitary Landfill reaching capacity. The West Hawaii's Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years."**

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

**3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste** Hawaii Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

**4)"What happens to Hawaii Island's trash and recyclables?" BY MICHELLE**

**BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022** By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support."

<https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

**5) "The overwhelming plastic waste Hawaii visitors leave behind**

By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

**6) "A County commission drafts ordinance aiming to ban recyclables at West**

Hawaii landfill By Megan Moseley September 6, 2023 · 1:00 AM HST

\* Updated September 6, 2023 · 2:02 PM

Hawaii County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023. 5:21 PM HST  
A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend."  
<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawaii Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY  
HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions."  
<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii%CA%BBi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024  
Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona."  
<https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST  
There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii Department of Health."  
<https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs, Current situation  
There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment."  
<https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>  
We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30."  
<https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) HELCO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM  
HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night."  
<https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?  
It is impossible to separate Hawaii's power system from its water system, said Kawika Uyehara, deputy director of Hawaii County's Department of Water Supply."  
<https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues  
By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News  
In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."  
<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) News Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 - 5:21 PM HS  
A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.  
<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

#### 18) **Hawai'i Water Supply Closely Monitored As Severe Drought Continues**

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm  
(BIVN) - With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.  
<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

homes, give Tax Breaks to all homes that provide solar and/or wind turbine to there to help with power issues on the island.

19) **"Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."**

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/?rdt=52660)

20) **"Hawaiian Electric asking Big Island customers to conserve power due to down generators**

March 25, 2024 - 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

#### **HISTORICAL AND CULTURAL SIGNIFICANCE:**

##### **The Law of the Splintered Paddle**

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed. The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, **the law is part of Hawaii's State Constitution today.**

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

**"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."**

**The Law of the Splintered Paddle is also on Kamehameha Schools website.** The historical value of this law should be enough to help make Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

**Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort**

**will use because the Big Island already has serious resource and infrastructure issues.**

## **IN CONCLUSION**

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keaouhou Bay and "The **Endangered Species Act of 1973 (ESA)** or "The Act": 16 U.S.C. § 1531 et seq. **is the primary law in the United States for protecting and conserving imperiled species.**

Designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President Richard Nixon on December 28, 1973. The Supreme Court of the United States described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation".<sup>[1]</sup> [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)  
This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keaouhou Bay on the other. This land **MUST** be conserved in order to keep Keaouhou Bay safe for all the marine life to be able to live there for years to come.

In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved. These issues **MUST** be solved before considering another resort development on Big Island. We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keaouhou Bay, the birthplace of King Kamehameha III. Keaouhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is **NOT** suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen. Please save Keaouhou Bay's marine life and help the island's resources by saying **NO** to a Bungalow Resort built by Kamehameha Schools.

Please reject this EIS because Kamehameha Schools has **NOT ACKNOWLEDGED OR ASKED** thousands of Hawaiians, or Hawaiian Descendants from Keaouhou Bay how they feel about developing this land, Keaouhou Bay.

They have asked **ONLY** a few families on an island that has thousands of Hawaiian people and here is video testimony from Kupuna Kumu Lily Kong who is a Keaouhou Bay descendant and her and her mother **OPPOSE DEVELOPMENT!**  
<https://vimeo.com/994680462>

Kupuna Kumu Lily Kong who was born in Keaouhou Bay and she states that she is against development. She also states that her mother was against development as well. Please listen to her words in her testimonial video about Keaouhou Bay on this link and know that this proves that descendant directly from Keaouhou Bay **OPPOSE THIS DEVELOPMENT** <https://vimeo.com/994680462> and it is **CULTURAL LAW THEY MUST BE HEARD AND ACKNOWLEDGED!**

These laws were created, "After these legal victories, the Kohanaiki 'Ohana worked to create a new law in the state of Hawaii to require Cultural Impact Statements along with Environmental Impact Statements for all future large-scale development. Act 50, the Cultural Impact Statement Law was adopted in 2000."  
<https://kohanaikiohaha.org/legal-victories>

Kupuna Kumu Lily Kong also states that there are burial grounds on the land that Kamehameha Schools wants to clear and it is told that Kamehameha Schools has bulldozed sacred land in the past and Keaouhou Bay's burial grounds **MUST BE RESPECTED AND NOT DISTURBED!**

Hawaiians locals have said that there were bones in the small cave that is at the base of Keaouhou Bay. These burials need to take priority over a Bungalow Resort Development.

There are over 6,219 signatures as of Aug. 5th (these signatures grow daily) and these signatures are Hawaiians, locals and tourist and some of these Hawaiians have left comments on why they are opposing this development.

**ALL OF THESE PEOPLE HAVE A RIGHT TO BE ACKNOWLEDGED AND THEIR VOICES HAVE VALUE TO BE HEARD, THESE PEOPLE MATTER AND IT IS CULTURAL LAW THEY MUST BE ACKNOWLEDGED!**

Here is the petition link with thousands of Hawaiian signatures and comments opposing Kamehameha Schools Bungalow Resort Development. Please read these signatures and comments! [https://www.change.org/p/save-keaouhou-bay-from-becoming-a-big-crowded-resort?utm\\_source=share\\_petition&utm\\_medium=custom\\_url&recruited\\_by\\_id=92a53560-1e91-11e5-b4ef-b94e90cedbdd](https://www.change.org/p/save-keaouhou-bay-from-becoming-a-big-crowded-resort?utm_source=share_petition&utm_medium=custom_url&recruited_by_id=92a53560-1e91-11e5-b4ef-b94e90cedbdd)

Please reject this EIS because under Princess Bernice Pauahi Bishop's Will it states Kamehameha Schools are her trustees and they have a "fiduciary duty" to do what is best for THEIR BENEFICIARIES (the Hawaiian people's) and a Bungalow Resort is BEST FOR TOURISTS NOT THE HAWAIIAN PEOPLE BECAUSE THOUSANDS OF HAWAIIAN PEOPLE SINGED THE ABOVE PETITION OPPOSING KAMEAHMEHA SCHOOLS BUNGALOW RESORT.

Please reject this EIS because the Big Island DOES NOT HAVE THE RESOURCES TO PROVIDE FOR ANOTHER BIG RESORT ON ISLAND and there are 445 signatures with many comments that agree with this fact because of the factual reported articles in the [Help Prioritize Big Island Developments to Keep Island's Resources Safe for ALL petition](https://www.change.org/p/help-prioritize-big-island-developments-resources-safe-for-all). Please read this petition, all the signatures and comments <https://www.change.org/p/help-prioritize-big-island-developments-to-keep-island-s-resources-safe-for-all>

Mahalo,  
Shannon Rudolph - Holuialoa

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How wonderful it is that nobody need wait a single moment before starting to improve the world. ~Anne Frank  
This message is the property of Kamehameha Schools and any attachments are confidential to the intended recipient at the e-mail address to which it has been addressed. If you are not the intended recipient, you may not copy, forward, disclose or use any part of this message or its attachments. If you received this transmission in error please notify the sender immediately by e-mail or contact Kamehameha Schools at webmaster@ksbe.edu and then delete this message from your system.

**From:** ALEXIS W RUSSELL <[REDACTED]>  
Saturday, August 3, 2024 2:44 PM  
**To:** 221053-01 KS Keaouhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keaouhoubay@ksbe.edu  
**Subject:** KEAHOUBAY

**Categories:** Green Category  
1.  
**Keaouhou Bay**

To whom it may concern,

Please reject Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keaouhou Bay.

Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff."

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keaouhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endangered these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,  
Alexis Wilson Russell

## Jacquelin Sabin

Keauhou bay should be preserved without further development, for the sake of its historical, cultural and natural significance. As a local residence within a couple miles of the intended site, there is zero positive impact to be gained for the people of Keauhou.

"THE MORE PEACE THAT IN US, THE MORE PEACE THERE WILL ALSO BE IN OUR TROUBLED WORLD." Ety Hillesum

AlexisWilson Russell

Nancy Sakamoto

---

**From:** Nancy Sakamoto <[REDACTED]>  
**Sent:** Thursday, July 25, 2024 1:52 PM  
**To:** 221053-01 KS Keauhou Entitlements  
**Subject:** Keauhou Bay Management Plan - Letter of Support  
**Attachments:** Support letter from N Sakamoto for the Keauhou Management Plan 7.25.24.pdf

**Categories:** Yellow Category

Aloha,

I have attached my letter of support for the well thought out plan for the revitalization of Keauhou Bay and its culturally significant landmarks. The plan addresses all my concerns for a safer, more accessible, and more welcoming environment for all to enjoy. Please accept my personal support.

Mahalo,

Nancy Sakamoto | Consultant

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

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Nancy Sakamoto  
76-4358 Leilani St.  
Kailua-Kona, HI 96740

Jan Salerno

July 25, 2024

County of Hawai'i, Planning Department

Aloha,

I write this letter in support of the Keauhou Bay Management Plan.

I have been a resident of Kailua-Kona, Hawaii since November 1963 and my father ran the boat dock at Keauhou Bay throughout the 1960's as well as moored his boat in Keauhou Bay.

I admire the insight to move the commercial activities out of the bay and over to a new section to ease both the traffic, while enhancing the historic and cultural value of the deep Hawaiian Culture that has long been missing in the bay over time. To bring these historic sites, such as the Holua Slide, the Kamehameha Birthplace marker and Mo'ikeha Cave, and Ka 'ili 'ilimehe Park as preserved points of interest is much needed. These treasured places must be saved and revered.

I fully support the efforts that Kamehameha Schools is taking in this very well thought out plan for Keauhou Bay and see how it will only enhance safety, pleasure, and understanding of its cultural significance for both residents and visitors to the area.

Mahalo,



Nancy Sakamoto

They want to take down all the trees on the right side that are between the bay and the golf course, and keep the golf course pollution out of the bay, and put the resort there!

Subject: Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT!

To whom it may concern,

Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a serious negative impact in Keauhou Bay.

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff."

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," shares that the golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are being held off from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endangered these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,  
Jan Salerno

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**From:** Jancis Salerno <[REDACTED]>  
**Sent:** Sunday, August 4, 2024 9:31 PM  
**To:** 221053-01 KS Keaouhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keaouhoubay@ksbe.edu  
**Subject:** Save Keaouhou Bay on Big Island  
**Categories:** Yellow Category

**Subject:** Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT!

To whom it may concern,

Please reject Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keaouhou Bay.

Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "*What is the biggest source of pollution in the ocean?*" by

NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff."

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

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This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,  
Jan Salerno

## Leslie Schmitz

Please see comments below and in attached document. Mahalo, Leslie Rae Schmitz

Leslie Rae Schmitz



June 29, 2024

Attn: Kawika McKeague, Principal Planner  
Group 70 International, dba G70  
111 S. King Street Suite 170  
Honolulu, HI 96813

Aloha Mr. McKeague:

I am providing these written comment pursuant to the Keahou Bay Management (KBM) Plan Environmental Impact Statement (EIS) Notice; KBM Plan dated March 2022. Issued by Kamehameha Schools Bishop Estates (KSBE) Applicant.

My husband, Brian, and I are community members of the Bayview Estates of Keahou, a subdivision whose community borders the KSBE properties. As neighbors for over a decade, we hold deep respect, appreciation and reverence for KSBE and all that it does for our Hawaii Island Community.

We are also completely aligned/and support the KBM Plan and wholeheartedly support KSBE efforts to build cultural awareness and "ohana" for all.

I am also grateful for the opportunity to comment on the KBM Plan.

With the KBM Plan EIS Notice dated March 2022, it is recommended that Section 3.4.6 Wild Land Fires be updated and revised to reflect wild fire safety mitigation efforts being recognized throughout the state of Hawaii in the aftermath of last summer's August 2023 tragic Lahaina Maui fire. As you are likely aware, the Big Island experienced wild fires along the Kohala Coast as a result of the same wind conditions experienced in the August 2023 Maui fire.

Please note the following comments focused on Section 3.4.6 Wild Land Fires of the KBM Plan/See Section 3.4.6 Wild Land Fires (excerpted):

It is my understanding that the land areas designated in the KBM Plan itself as well as surrounding areas including HI County Ag5 Designated lands owned by KSBA are considered HIGH Fire Risk by HI-County.

With the introduction of new housing and other buildings in the KBM Plan, these new structures will be vulnerable to wild land fires. This new development will also increase the risk of wildfires to neighboring lands and communities, including our in Bayview Estates community.

Shortly after the Maui fire last summer, Bayview Estates created the Bayview Estates Fire Safety Committee of which I am a member. Part of my involvement with the Fire Safety Committee included the following research on wild fire safety which was shared with our Bayview Community members:

PLEASE SEE ATTACHED DOCUMENT FOR RELEVANT LINKS AND REFERENCES IN THE BELOW COMMENTS:

- The primary threat to a home or building during a wildfire is embers and small flames from burning pieces of wood and/or vegetation that become airborne. These airborne embers and small flames can be carried more than a mile causing spot fires and igniting homes and structures as well as debris and other objects along the way.
- Studies have shown that homes/structures ignite due to the condition of the home and everything around the home/structure called the Home Ignition Zone Understanding the Wildfire Threat to Homes: An overview of fire history, fire basics, and how homes burn.

I would like to recommend the following Firewise Safety/Mitigation language be added to the KBM Plan Section 3.4.6 to include:

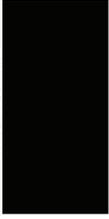
1. Creating a strategy to mitigate potential effects of wildfires on property and risk to lives including developing and adopting Firewise Landscaping/Hardscaping Guidelines for the homes/structures envisioned in the KBM Plan.
2. Forming a Firewise Safety Committee using the Waikaloa Homeowners Association as an example and adopting guidelines which could be added to Section 3.4.6: <https://www.waikoloa.org/fire/>
3. Removing (in partnership with HECO and Kona Country Club golf course) currently inactive HECO powerlines from KSBE

AgFive Designated areas. Efforts are already underway with HECO on other islands to remove inactive HECO lines and the KBM Plan would include the removal of unused, de-engorgized powerlines to mitigate wild fire. <https://www.hawaiinewsnow.com/2024/06/21/popular-east-oahu-hiking-trail-close-heco-crews-remove-unused-power-lines/>

4. Partnering with HECO to identify and remedy risks caused by exposed, active powerlines located on the new KBM Plan including burying lines for new construction.

I am happy to provide any additional assistance in drafting language to include in Section 3.4.6 Wild Fire Safety or otherwise be of service to KSBE and the KBM Plan.

Mehalo  
Leslie Rae Schmitz  


Leslie Rae Schmitz  


June 29, 2024

Attn: Kawika McKeague, Principal Planner  
Group 70 International, dba G70  
111 S. King Street Suite 170  
Honolulu, HI 96813

Aloha Mr. McKeague:

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We are also completely aligned/and support the KBM Plan and wholeheartedly support KSBE efforts to build cultural awareness and "ohana" for all.

I am also grateful for the opportunity to comment on the KBM Plan.

*With the KBM Plan EIS Notice dated March 2022, it is recommended that Section 3.4.6 Wild Land Fires be updated and revised to reflect wild fire safety mitigation efforts being recognized throughout the state of Hawaii in the aftermath of last summer's August 2023 tragic Lahaina/Maui fire. As you are likely aware, the Big Island experienced wild fires along the Kohala Coast as a result of the same wind conditions experienced in the August 2023 Maui fire.*

Please note the following comments focused on Section 3.4.6 Wild Land Fires of the KBM Plan (excerpted):

### 3.4.6 Wild Land Fires

The greatest danger of fire is where wild land (trees and brush) borders urban areas. Although all the Hawaiian Islands are vulnerable to wild-land fires (especially during the summer months, prolonged drought and/or high winds), the great majority of wildfires are human-caused (intentionally caused or by negligence) and start along roadsides. The numbers of such fires are increasing. Wildfires can and do also occur naturally. Hawaii County has a Fire Prevention Bureau that works to prevent fires before they can cause injuries and property damage. The proposed project will comply with all fire code requirements.

It is my understanding that the land areas designated in the KBM Plan itself as well as surrounding areas including HI County Ag5 Designated lands owned by KSBA are considered **HIGH Fire Risk by HI-County**.

With the introduction of new housing and other buildings in the KBM Plan, these new structures will be vulnerable to wild land fires. This new development will also increase the risk of wildfires to neighboring lands and communities, including our in Bayview Estates community.

Shortly after the Maui fire last summer, Bayview Estates created the Bayview Estates Fire Safety Committee of which I am a member. Part of my involvement with the Fire Safety Committee included the following research on wild fire safety which was shared with our Bayview Community members:

- The primary threat to a home or building during a wildfire is embers and small flames from burning pieces of wood and/or vegetation that become airborne. These air borne embers and small flames can be carried more than a mile causing spot fires and igniting homes and structures as well as debris and other objects along the way.

- Studies have show that homes/structures ignite due to the condition of the home and everything around the home/structure called the Home Ignition Zone [Understanding the Wildfire Threat to Homes. An overview of fire history, fire basics, and how homes burn.](#)

I would like to recommend the following Firewise Safety/Mitigation language be added to the KBM Plan Section 3.4.6 to include:

1. Creating a strategy to mitigate potential effects of wildfires on property and risk to lives including developing and adopting Firewise Landscaping/Hardscaping Guidelines for the homes/structures envisioned in the KBM Plan.
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3. Removing (in partnership with HECO and Kona Country Club golf course) currently inactive HECO powerlines from KSBE AgFive Designated areas. Efforts are already underway with HECO on other islands to remove inactive HECO lines and the KBM Plan would include the removal of unused, de-energized powerlines to mitigate wild fire. <https://www.hawaiinewsnow.com/2024/06/21/popular-east-coast-hiking-trail-close-heco-crews-remove-unused-power-lines/>
4. Partnering with HECO to identify and remedy risks caused by exposed, active powerlines located on the new KBM Plan including burying lines for new construction.

I am happy to provide any additional assistance in drafting language to include in Section 3.4.6 Wild Fire Safety or otherwise be of service to KSBE and the KBM Plan.

Mahalo,



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**From:** Jean Schumer <[REDACTED]>  
**Sent:** Thursday, August 8, 2024 1:43 PM  
**To:** Alex.Roy@hawaiicounty.gov; 221053-01 KS Keaouhou Entitlements  
**Subject:** Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT  
**Categories:** Yellow Category

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keaouhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is **scientifically proven** that developments pollute nearby waters both **during and after development**.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have **ALWAYS** polluted the water in **EVERY** coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development **WILL be CHANGING an Entire Ecosystem**.

#### **ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT**

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

#### **Endangered Species Act**

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

#### **FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED**

The green sea turtle is federally protected and can be seen in Keaouhou Bay weekly.

The following article states: **"POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"**

#### **Why does Hawaii have a runoff problem?**

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

**Allowing this development WILL POLLUTE Keaouhou Bay.** The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keaouhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen **because developments have been shown to ALWAYS pollute the water is that is nearby.**

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawaii are protected by the Endangered Species Act (ESA) and additionally protected by Hawaii Revised Statutes Chapter 195D (HRS) and Hawaii Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

## THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keaouhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keaouhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

**Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keaouhou Bay will likely be changed forever.**

This information is from a NOAA Scientist: **"Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'!"** That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-civ-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dmr.hawaii.gov/dar/hawaiian-monk-seal/>

**Keaouhou Bay is the monk seals and the green sea turtle's habitat.** Allowing a bungalow resort to be developed in Keaouhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. **By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.**

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to **protect the land around Keaouhou Bay** from developments that destroy the habitat of these endangered species with pollution and runoff.

**Does this EIS have any reports on the endangered species that frequent Keaouhou Bay? This is their habitat and it needs to be "conserved".**

Under the **Conservation Program** there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems,

and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm).

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keaouhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keaouhou Bay and the surrounding area during the building phase of this enormous project.

## GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keaouhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "

Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20driv%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20driv%20wells)

The pavement from this development will cause pollution to runoff into Keaouhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keaouhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where **the Hawai'i government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keaouhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.**

**These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.**

Under Section 2 (b) of the Endangered Species Act - **Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species.** It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

### **ALGAE BLOOMS KILL CORAL AND MARINE LIFE**

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

**Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.**

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

**Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?**

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution..

" <https://www.globalcoral.org/golf/courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf/course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

**Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?**

This needs to be fully assessed because **you will be changing an entire ecosystem** to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

**FURTHERMORE:** "If there are [toxic algal blooms](#), like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

### **ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN**

**Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?**

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

**The article below is from NOAA regarding motor vehicle engines and pollution to the sea.**

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

**Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects**

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a [new report](#) from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%20Neatly%2085%20percent,pipeline%20spills%2C%20sa%20a%20new>

### **The Impact Of Stormwater – Car Emissions**

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershepherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

### **NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE**

**Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?**

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

### **How Does Noise Pollution Harm Marine Species?**

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the

welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

### **What is ocean noise?**

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

### **LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS**

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is **a lot bigger** than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

**This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states,** "...runoff is a significant source of harmful nitrogen pollution that continues to grow ...

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20leopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

### **MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN**

**Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?**

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

#### **It's Been Proven Developments Severely Pollute Nearby Waters**

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii". Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide...

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off). " <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,hard%20catastrophic%20impacts%20state%20wide.>

**This article is by the Coral Reef Alliance here in Hawaii.** "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we->

[workhawaiian-islands/#:~:text=Hawai%CA%BBi's%20reefs%20face%20major%20global,into%20Hawai%CA%BBi's%20waterways%20every%20day.](http://workhawaiian-islands/#:~:text=Hawai%CA%BBi's%20reefs%20face%20major%20global,into%20Hawai%CA%BBi's%20waterways%20every%20day.)

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "**Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019...**"

**We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress.** In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

**"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.**

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

**Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species."** <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%20based%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "**Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide.**" <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. **Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.**

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "**Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)**

**Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival"** [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

#### **It's Been Proven Resort Developments Kill Marine Life**

This article by MarinBio states, "**Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change.** Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon. The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. **This occurred in a relatively short time considering that the experiment lasted less than three weeks.** The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

**The ecosystem is fragile and interconnected as is stated in this article:** "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by

MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "**Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage.** Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_267-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_267-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

#### **HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH**

**Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?**

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: **The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life.**" <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

**Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.**

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development/#:~:text=Coastal%20development%20may%20cause%20the,negative%20impact%20enitre%20food%20webs>.

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. **Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it.** Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations>.

#### It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. **Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs.** Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Deniser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation>.

This article is by ABC NEWS, **"This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found.** The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment – especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%20C%20the%20research%20found,&text=The%20millions%20of%20tourists%20who,world%20C%20a%20new%20study%20said>.

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night

dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

**"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction.** Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquacultur,e%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation>.

Another article by Nature Sustainability, **"Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism.** Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?shating\\_token=wsakqONhahJiAnWAq453tRqN0iAWel9mR3ZoTv0PVzGA5lc\\_H001zGHNP3AShtcgKRY6\\_vKLPw49dbmBYoX5g3Y1MgQIGBZsapidGJH7i01SLbu9x5P3xED4Kx4T0sJlvqQ1a72Zr3rUbraxpodJ42AoNiSmWSuxB7JIEDdpj8OGJpx71TJWwGfXvFKJZYeNdcJ3Ssw\\_dnaUg5ZlhqIPBDImmaH15vgT5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?shating_token=wsakqONhahJiAnWAq453tRqN0iAWel9mR3ZoTv0PVzGA5lc_H001zGHNP3AShtcgKRY6_vKLPw49dbmBYoX5g3Y1MgQIGBZsapidGJH7i01SLbu9x5P3xED4Kx4T0sJlvqQ1a72Zr3rUbraxpodJ42AoNiSmWSuxB7JIEDdpj8OGJpx71TJWwGfXvFKJZYeNdcJ3Ssw_dnaUg5ZlhqIPBDImmaH15vgT5Q%3D&tracking_referrer=abcnews.go.com)

#### INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

**Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?**

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

**Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?**

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. **Worldwide, hotels produce almost 300,000 tonnes of waste each year.**" <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keauhou Bay. On Hawaii Island, we are already struggling to meet the increasing need for resources and infrastructure.

PAULA BENDER April 2, 2024

### **Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill**

September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

### **A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill**

By [Megan Moseley](#) September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

### **Time's Up For Landfills**

'Gentle' demolition strategies can help preserve resources

15

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

### **Drought Conditions On Hawai'i Island Prompt Water Supply Message**

by Big Island Video News  
on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawai'i Island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information from the [U.S. Drought Monitor](#). There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

### **From a Water Supply news release:**

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawaii%CA%BB%island-prompt-water-supply-message/>

[U.S.](#)

### **Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**

By [Li Cohen](#)

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

16

And recent years have seen compounding problems: less rain, leading to [significant droughts](#), and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the [world's largest surfing wave pool](#) opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe."

**"We are in a water crisis, that has to be made very clear,"** Wayne Tanaka, director of Sierra Club of Hawaii, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

#### UPDATE: HELCO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity use is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

**Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.**

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

17

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

#### Big power supply problems continue to plague Hawaii Island

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

**The company explained that it faces an "extremely tight" supply of power at peak use periods,** especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

#### Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

18

**-If there is not enough electricity to meet demand,** Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumbreaknews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

#### **FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES**

**A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?**

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawaii News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "**Hawaii Island has most traffic fatalities in state.** This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

**"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here,"** he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

**The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.**

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: **All of these roads only have two lanes!**

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FQSnPDjig>

**Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.**

#### **Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:**

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) **“What happens to Hawaii Island’s trash and recyclables?”** BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 BY Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) **“The overwhelming plastic waste Hawaii visitors leave behind**  
By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists’ first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) **“A County commission drafts ordinance aiming to ban recyclables** at West Hawaii landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawaii County’s Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island’s only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) **“Hawaii County issues mandatory 25% water restriction** for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) **“Hawaii Water Supply Closely Monitored As Severe Drought** Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca-%Bibi-under-severe-drought/>

9) **“Big Island Concerns About Water Quality** Prompt A Lawsuit Over A Kona Sewage Plant Kealahou sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

**“That’s just Big Island traffic,”** is a common sentiment. But what if we didn’t have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

## **MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC and WASTEWATER:**

1) **Hawaii Deals with Burgeoning Waste Management Problem**

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) **“Big Island Now readers seem to agree that there’s likely no** single solution for slowing down the timeline of the West Hawaii’s Sanitary Landfill reaching capacity.

The West Hawaii’s Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) **Hawaii Island Has Decades of Landfill Space But Still Faces** Challenges In Dealing With Its Waste Hawaii Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of the island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

**10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii'i Public Radio** | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii'i Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

**11) "Kona coast faces stark wastewater tradeoffs, Current situation**

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

**12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi** Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/helo-initiates-30-min-rolling-outages-after-loss-of-generators/>

**13) Hawaii'i State News Update: Hawaiian Electric initiates rolling outages throughout Big Island** February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

**14) HELCO issues rolling power outages around Big Island by: Emily Cervantes** Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/helo-releases-conservation-alert-for-big-island/>

**15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii'i Public Radio** | By Savannah Harriman-Pole Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii'i Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawika Uyehara, deputy director of Hawaii'i County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

**16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

**17) News Hawaii'i County issues mandatory 25% water restriction for North Kona** August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

**18) Hawaii'i Water Supply Closely Monitored As Severe Drought Continues**

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) — With an ongoing drought on the island of Hawaii, the Hawaii'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-CA-%BBI-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/?rdt=52660)

20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

## HISTORICAL AND CULTURAL SIGNIFICANCE:

### The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, **the law is part of Hawaii's State Constitution today.**

It is symbolic of servant leadership, reinforcing the importance of:

-Caring for and serving one's people

-Knowing and doing what is pono (right)

-Standing for the principle that leadership privilege is earned

-Taking kuleana (responsibility) for those we serve

-Doing so with compassion, love, and respect

**"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."**

**The Law of the Splintered Paddle is also on Kamehameha Schools website.** The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-true-200-years-after-k>

**Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.**

## IN CONCLUSION

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keauhou Bay and "The Endangered Species Act of 1973 (ESA or "The Act"; 16 U.S.C. § 1531 et seq.) is the primary law in the United States for protecting and conserving imperiled species. Designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President Richard Nixon on December 28, 1973. The Supreme Court of the United States described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation".<sup>[1]</sup> [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other. This land MUST be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come.

In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved. These issues MUST be solved before considering another resort development on Big Island.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly protects the

marine life and environment from further damage. The location is NOT suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen.

Please save Keaouhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.

Please reject this EIS because Kamehameha Schools has NOT ACKNOWLEDGED OR ASKED thousands of Hawaiians, or Hawaiian Descendants from Keaouhou Bay how they feel about developing this land, Keaouhou Bay.

They have asked ONLY a few families on an island that has thousands of Hawaiian people and here is video testimony from Kupuna Kumu Lily Kong who is a Keaouhou Bay descendants and her and her mother OPPOSE DEVELOPMENT! <https://vimeo.com/994680462>

Kupuna Kumu Lily Kong who was born in Keaouhou Bay and she states that she is against development. She also states that her mother was against development as well. Please listen to her words in her testimonial video about Keaouhou Bay on this link and know that this proves that descendant directly from Keaouhou Bay OPPOSE THIS DEVELOPMENT <https://vimeo.com/994680462> and it is CULTURAL LAW THEY MUST BE HEARD AND ACKNOWLEDGED!

These laws were created, "After these legal victories, the Kohanaiki 'Ohana worked to create a new law in the state of Hawaii to require Cultural Impact Statements along with Environmental Impact Statements for all future large-scale development. Act 50, the Cultural Impact Statement Law was adopted in 2000." <https://kohanaikiohana.org/legal-victories>

Kupuna Kumu Lily Kong also states that there are burial grounds on the land that Kamehameha Schools wants to clear and it is told that Kamehameha Schools has bulldozed sacred land in the past and Keaouhou Bay's burial grounds MUST BE RESPECTED AND NOT DISTURBED!

Hawaiians locals have said that there were bones in the small cave that is at the base of Keaouhou Bay. These burials need to take priority over a Bungalow Resort Development.

There are over 6,219 signatures as of Aug. 5th (these signatures grow daily) and these signatures are Hawaiians, locals and tourist and some of these Hawaiians have left comments on why they are opposing this development.

ALL OF THESE PEOPLE HAVE A RIGHT TO BE ACKNOWLEDGED AND THEIR VOICES HAVE VALUE TO BE HEARD, THESE PEOPLE MATTER AND IT IS CULTURAL LAW THEY MUST BE ACKNOWLEDGED!

Here is the petition link with thousands of Hawaiian signatures and comments opposing Kamehameha Schools Bungalow Resort Development. Please read these signatures and comments! [https://www.change.org/p/save-keaouhou-bay-from-becoming-a-big-crowded-resort?utm\\_source=share\\_petition&utm\\_medium=custom\\_url&recruited\\_by\\_id=92a53560-1e91-11e5-b4ef-b94e90cedb0d](https://www.change.org/p/save-keaouhou-bay-from-becoming-a-big-crowded-resort?utm_source=share_petition&utm_medium=custom_url&recruited_by_id=92a53560-1e91-11e5-b4ef-b94e90cedb0d)

Please reject this EIS because under Princess Bernice Pauahi Bishop's Will it states Kamehameha Schools are her trustees and they have a "fiduciary duty" to do what is best for THEIR

**BENEFICIARIES (the Hawaiian people's) and a Bungalow Resort is BEST FOR TOURISTS NOT THE HAWAIIAN PEOPLE BECAUSE THOUSANDS OF HAWAIIAN PEOPLE SINGED THE ABOVE PETITION OPPOSING KAMEAHMEHA SCHOOLS BUNGALOW RESORT.**

Please reject this EIS because the **Big Island DOES NOT HAVE THE RESOURCES TO PROVIDE FOR ANOTHER BIG RESORT ON ISLAND** and there are 445 signatures with many comments that agree with this fact because of the factual reported articles in the **Help Prioritize Big Island Developments to Keep Island's Resources Safe for ALL petition. Please read this petition, all the signatures and comments <https://www.change.org/p/help-prioritize-big-island-developments-to-keep-island-s-resources-safe-for-all>**

Mahalo,

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project, because it is scientifically proven that developments pollute nearby waters constantly during development and after.

Please read these Scientific articles written by NOAA, National Oceanic and Atmospheric Administration and many other professional organizations, that have studied and proved that developments has ALWAYS polluted the water in every near coastal developed area.

**First, does this EIS have any kind of reports and studs on how the endangered species and marine life will handle the extra pollution due to development and golf course runoff because Keauhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.**

**In the Endangered Species Act of 1973 Under Section 2 (b), "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keauhou Bay.**

The Green Sea Turtle swims in Keauhou Bay weekly and the monk seal has also been seen swimming and resting in Keauhou Bay. Both of these marine animals are on the endangered species list.

The Green Sea Turtle is protected by more than one law. " All sea turtles in Hawai'i are protected by the [Endangered Species Act \(ESA\)](#) and additionally protected by [Hawai'i Revised Statutes Chapter 195D \(HRS\)](#) and [Hawai'i Administrative Rules \(HAR\) 13-124](#)." This information was taken from this [site https://dlnr.hawaii.gov/dar/species/sea-turtles/](https://dlnr.hawaii.gov/dar/species/sea-turtles/).

"Hawaiian monk seals are protected federally by the ESA and the [Marine Mammal Protection Act \(MMPA\)](#), as well as locally by Hawai'i Revised Statutes (HRS) [Chapter 195D](#) and Hawai'i Administrative Rules (HAR) [13-124](#)." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

**ENDANGERED SPECIES CONSERVATION**

Endangered Species Act

**"Section 2. Findings, Purposes, and Policy**

**(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—**

**(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."** This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-act>

Keauhou Bay IS the monk seals and the green sea turtle's habitat and to allow a bungalow resort to be developed in Keauhou Bay, that is these endangered species habitat, is to threaten these endangered

**From:** keauhoubay <keauhoubay@ksbe.edu>  
**Sent:** Tuesday, July 30, 2024 4:36 PM  
**To:** Deborah Sevy  
**Cc:** 221053-01 KS Keauhou Entitlements; Alex.Roy@hawaiicounty.gov  
**Subject:** RE: [EXTERNAL] keahou Bay

**Categories:** Yellow Category

Aloha e Deborah -

Thank you for your comments concerning the Keauhou Bay Management Plan, Draft Environmental Impact Statement. Your comments have been received and administratively recorded.

Comments received during the 45-day public comment period will be reproduced in the Final Environmental Impact Statement, and substantive comments addressed.

The County of Hawai'i and our planning consultant, G70, are copied here on this email so that they receive a copy of your feedback.

We appreciate your involvement and contribution to the environmental review process. Your input is invaluable in helping us develop a management plan that reflects the needs and concerns of our community.

Thank you once again for your engagement and commitment to the future of Keauhou Bay.

Mahalo,  
The Keauhou Bay Project Team

**From:** Deborah Sevy <[REDACTED]>  
**Sent:** Saturday, July 20, 2024 1:41 PM  
**To:** keauhoubay <keauhoubay@ksbe.edu>  
**Subject:** [EXTERNAL] keahou Bay

**CAUTION: This email is from an outside sender. Do not click on links or open attachments unless you recognize the sender and know the content is safe.**

To whom it may concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT in Keauhou Bay as stated in all the different researched articles below.

species habit with golf course runoff pollution, as well as development pollution and hence, threaten their habitat, hence their lives, and goes completely against the Endangered Species Act of 1973.

The words in the Endangered Species Act states, "to conserve" and conserving the endangered species that enter into Keauhou Bay would be to NOT DEVELOP A BUNGALOW RESORT because this would cause serious pollution runoff that would pollute the bay and endanger these already endangered species, the green sea turtle and the monk seal.

**Does this EIS have any reports on the endangered species that frequent Keauhou Bay because this is their habitat.**

**Under the Conservation Program there should be research done on endangered species and their associated ecosystems, which is Keauhou Bay. Because this bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.**

**"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)**

**Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species."**

**[https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)**

Please see that developing Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would happen a lot more often due to taking out the natural pollution filter, that is the trees and the land that is there now.

"The golf industry uses [approximately 50 pesticide active ingredients](https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses), including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely because of the bungalow resort development's pavement. As of right now the trees and land that this development wants to clear and develop into a bungalow resort is a Natural Pollution Filter.

Please read from **Wikipedia**,

**Most drains** have a single large exit at their point of **discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean**. Other than catchbasins, **typically there are no treatment facilities in the piping system**. "[https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,disc%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,disc%20into%20individual%20dry%20wells)

It's the pavement that this development wants to put in that will cause a lot of pollution to runoff into Keauhou Bay because this top land that is directly below the golf course (that they want to clear) soaks in the golf course pesticides, fertilizer, weed killer... and is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pollution.

Please see this site at <https://health.hawaii.gov/eppo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> because on page 2 it states **from the Hawaii'i government that Natural Ground Cover has 10% runoff, where has development has 55% runoff.**

**These trees and land** are saving monk seals and green sea turtles habitat from the golf course pollution and this land **MUST BE PRESERVED and CONSERVED** as the natural protector for Keauhou Bay hence, **for these endangered species habitat.**

**Under Section 2 (b) of the Endangered Species Act** - Keauhou Bay **MUST BECOME a CONSERVATION AREA** for these endangered species because it is their habitat as of today, and to allow a resort development to be built above this bay would threaten the very lives of these endangered species because it will allow golf course toxic pollution and development pollution to run into these species natural habitat, which is Keauhou Bay.

Keauhou Bay has trees and land just under the golf course (that Kamehameha Schools wants to clear for their bungalow resort) that protects Keauhou Bay from a lot of algae blooms because it soaks up pollution that is runoff from fertilizer, weed killer... in the golf course, and unfortunately when there is a severely heavy rain storm the land up on top of the bay has a greater runoff than normal from the golf course pollution, and pollution foam and algae blooms happen because of it.

If you clear this land, this kind of algae bloom will happen a lot more often and end up killing a lot of coral and marine life as stated in the many articles that will follow.

One of these articles is in the Global Coral Reef Alliance. They researched the reef before and after a golf course development, and even though this development is not a golf course development, it is still a development and it will also be located just under a golf course and this will allow the pollution from the golf course to come down to the bay a lot more often because the natural land that soaks up this pollution will be gone.

**Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?**

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution..

[". https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/](https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/)

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING KEAUHOU BAY'S ECOSYSTEM because the golf course runoff won't have the best protection which is the natural trees and land that can soak up the polluted water most of the year and polluted foam algae blooms will happen a lot more often.

Here is another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef

...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

#### **Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?**

This needs to be fully known because you will be changing an entire ecosystem to build a bungalow resort. Because it rains in Keauhou Bay many nights out of the year and the land they want to clear absorbs the golf course toxins so this bay is not as severely polluted as it will be with pavement and development, and when serious storms come Keauhou Bay won't stand a chance because the land can't keep ALL golf course pollutions out during this time and pavement won't even come close.

"If there are toxic algal blooms, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

#### **Federally Protected Green Sea Turtle Swim in Keauhou Bay Often**

The green sea turtle that is federally protected and can be seen in Keauhou Bay weekly. Please see the following article that states "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES

#### **Why does Hawaii have a runoff problem?**

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

If you allow this development it WILL POLLUTE Keauhou Bay as the above article (that was written in 2014 because runoff water from developments were polluting the ocean even then) states, and this bay holds many sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals that have rested on the dock before and...that will ALL be harmed by the more severe pollution runoff that WILL happen because developments can't help but pollute the water nearby.

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL, and if a resort is allowed to be built, that will bring a lot more people down to Keauhou Bay and if a monk seal is resting they most likely will disturb the monk seal with their selfies because it is fully known this is now a SELFIE CULTURE.

#### **Has the EIS done any research on what a high population would do in such a small area, and what will happen to the endangered species that live there because it's their habitat and a high population will change this bay forever?**

This information is by NOAA Scientist, "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media.

There's a seal on the beach! Let's go get a 'selfie!'" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In a recent study, NOAA scientists used social media to monitor human activities around endangered [Hawaiian monk seals](https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-four-over-selfies). They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-four-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

#### **Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?**

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, in Hilo, Puna, and there are Ocean View and Volcano housing construction projects as well. The entire Big Island has construction projects all over.

#### **Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?**

Because, "Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises.

Worldwide, hotels produce almost [300,000 tonnes of waste](https://www.homebiogas.com/blog/hotels-waste-management/) each year."

<https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means these resources and infrastructures will be taxed even more in the near future.

Please read the below articles that prove that Big Island doesn't have the resources or infrastructure for a Bungalow Resort Development because it will increase the need for resources and infrastructure that the island doesn't have as of today.

### **Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill**

September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years. (File photo)

Of the 900 total votes in our most recent poll, which asked people to weigh in on the best way to extend the life of the Big Island's only remaining landfill, all of the above was the most popular answer, garnering 274 votes, or 30%.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

### **A county commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill**

By **Megan Moseley** September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill>

### **Time's Up For Landfills**

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 12, 2024

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

### **Drought Conditions On Hawai'i Island Prompt Water Supply Message**

by **Big Island Video News**  
on Oct 5, 2023 at 3:59 pm

**(BIVN)** – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information from **the U.S. Drought Monitor**. There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawai%CA%BBI-island-prompt-water-supply-message/>

## [U.S.](#)

### **Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**

By [Li Cohen](#)

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to [significant droughts](#), and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the [world's largest surfing wave pool](#) opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe."

"We are in a [water crisis](#), that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawai'i, told CBS News, saying that if the reasons for this crisis aren't soon addressed, **"We may come to a point where we have to decide ... who gets water and who doesn't."**

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island parts need to be shipped and the power plant has generators that are not working and because of this, and other reasons, the Big Island needs to seriously conserve power so that everyone will have power, and if this problem of shipping parts can happen once it can happen again.

## UTILITIES

UPDATE: HECO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HECO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity use is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

### **Big power supply problems continue to plague Hawaii island**

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

**Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.**

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

### **What You Need To Know**

**-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity**

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

**Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?**

**Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? Because they will have employees with cars, guests with cars, visitors with cars and this would range at times at least over 200 cars or more, parking above Keauhou Bay causing serious car population because of all these added cars right next to the bay.**

Article below is from NOAA.

**What is the biggest source of pollution in the ocean?**

**Most ocean pollution begins on land.**

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats."

<https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

**News Release September 28, 2023**

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and

affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20saves%20a%20new>

The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershedwards.org.au/blog/the-impact-of-stormwater-car-emissions/>

**Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?**

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behaviour of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

**OCEANS POLLUTION**

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawai'i's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkelling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

**What is ocean noise?**

"Ocean noise refers to sounds made by human activities that can **interfere with or obscure** the ability of marine animals to **hear natural sounds in the ocean**.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

**The Chesapeake Bay has a foundation that is trying to save it due to runoff pollution that was caused by developments, and the Chesapeake Bay is a lot bigger than Keauhou Bay.** If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed because this bay is very small.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "... **runoff is a significant source of harmful nitrogen pollution that continues to grow...**

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

**Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.**

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

**If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay because it is so much smaller than the Chesapeake Bay.**

**Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?**

**Because the studies below show developments kill coral, marine life and zooplankton are kill and negatively affected as well, and zooplankton is the manta ray food. Manta rays are in this bay every night to eat zooplankton and sometimes they are in this bay during the day time too.**

If you allow this bay to be development you will be allowing all types of marine life to die and there is NO WAY to stop this from happening because polluted runoff rain water from developments can't be fully stopped. It is what has happened in ALL coastal developments.

Please read the Scientific proof below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawai'i. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts statewide..."

This was the third major bleaching episode in Hawai'i over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off). "<https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,had%20catastrophic%20impacts%20statewide.>

This article is by the Coral Reef Alliance here in Hawai'i. "An ecosystem under threat Hawai'i's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian-islands/#:~:text=Hawaii%CA%BBIs%20reefs%20face%20major%20global,into%20Hawaii%CA%BBIs%20waterways%20every%20day.>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forwe\\_b.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forwe_b.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. **Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress.** In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all Aquatic Life there, and even the Manta Rays that go there to eat zooplankton from the Manta Ray tours at night, and they eat it during the day in that area as well because they need to eat 5 times their body weight in zooplankton daily. Please see the cited information below.

**"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.**

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

**Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,....can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species."** <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%20based%20sources.and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,service%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=Th is%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=Th is%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

The manta rays go to Keauhou Bay every night to eat zooplankton and if you allow this development that WILL have runoff water, you WILL be causing zooplankton to be seriously affected because as this article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem...."

Here is another article that proves runoff from development in this area will hurt and kill plankton, by **Frontiers in Marine Science**, **"Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon** The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

"Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

Here is a research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses: **"Toxic Effects of Pollutants on Plankton** There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation." [https://scope.dge.carnegiescience.edu/SCOPE\\_12\\_3.6\\_chapter\\_12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12_3.6_chapter_12_257-274.pdf)

The above articles show that development of Keaouhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this could cause the manta ray food source to disappear and that will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on the manta ray tour for their income.

#### **Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?**

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, **there likely be more than 6,300 people descending on Kona...**" <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

#### **Where are the EIS reports on human density because this resort will increase this area in population by hundreds. Below are reports that human population destroy coral reefs.**

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the **destruction of sensitive marine habitats** such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of **sediments** into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keaouhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally,

management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

#### **It's Been Proven an Increase in Human Population Destroys Coral Reefs**

If a Bungalow Resort is allowed to be built in Keaouhou Bay, it will forsure bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regards to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=9630885&#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20study%20said.>

If you allow this resort to be developed, you will be destroying the coral reefs in the bay because this bay is extremely small and used by a lot of locals already for fishing, canoeing, swimming, snorkeling, paddle boarding, surfing, boating...it can't afford more use by many thousands more people yearly.

If you allow Keaouhou Bay to be development there will be a higher population in the bay and that will hurt the coral in the bay as well, because it's known that, "Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with metapopulation theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science

Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both

their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaHjAnWAq453RgN0JAiWeI9inR3ZoTv0PyGzA5Ic\\_H0O1zcHNIP3ASnhcgKRv6\\_wkLEw49dbmBYoX5g3Y1MgQIG8ZsapdGUHIZO1SLbu9x5P3xED4KxI4IOsIjvGQJa7Z2Rk3Ubraxpod42AoNlSmWSuX87JjEDdplj8OGjpx71TWGcfvFKlZVeNdcIj3Sw\\_dnalj5ZlhcjPBDImmaH15yqI5Q%3D&tracking\\_referrer=abcnews-go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaHjAnWAq453RgN0JAiWeI9inR3ZoTv0PyGzA5Ic_H0O1zcHNIP3ASnhcgKRv6_wkLEw49dbmBYoX5g3Y1MgQIG8ZsapdGUHIZO1SLbu9x5P3xED4KxI4IOsIjvGQJa7Z2Rk3Ubraxpod42AoNlSmWSuX87JjEDdplj8OGjpx71TWGcfvFKlZVeNdcIj3Sw_dnalj5ZlhcjPBDImmaH15yqI5Q%3D&tracking_referrer=abcnews-go.com)

**A Resort Development WILL Increase Traffic on Already Severely Trafficed Roads. Where are the traffic study reports for this EIS because with 150 rooms comes over 150 cars because you must include employee cars, as well as visitors for the people staying in the resort, and what if the guests have more than one car?**

The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side.

Allowing another resort to be developed will bring more cars that will lead to a lot more traffic that the island can not handle, please read the articles below by different NEWS companies that prove this point.

This NEWS article by Hawaii! News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Please watch their video on their link below because it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/news-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists comes more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state, This time last year Hawaii island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks...

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalties-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is the same for Big Island. The traffic problems they talk about are the same issues here on Big Island, and this article also gives one Big Island example, "On the Big Island, the mayor had to issue an [emergency order](#) shutting down Waipio Valley Road due to

overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

Please, watch the NEWS video below on aerial footage in Hilo because the footage shown is the same thing that is happening on Alii Drive and Queen K HWY, and for the same reasons, all of these roads only have 2 lanes.

There are 2 developments already on Alii Dr. being built as of today, and more are scheduled for this road in the near future, and Alii Dr. and Queen K HWY are the roads Kamehameha Schools Bungalow Resort will be using if approved and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems, traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well.

See the photo below that proves this point in Kona, and here is the NEWS article by KITV NEWS that talks about Hilo and the same thing is happening in Kona on the roads Kamehameha Schools wants to develop their resort, "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash on Alii Dr. and when there is an accident on this road, it turns into only one lane that needs a flagger to help direct traffic, and that adds even more traffic to this already seriously congested road, and Kamehameha Schools wants to add a resort on this road that will increase the traffic by 100's of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FQsnPDjI8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Please read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path as well as The Law of the Splintered Paddle below <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

### **The Law of the Splintered Paddle**

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law, "[K?n?wai M?malahoe](#)" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless (especially K?puna and keiki) across Hawaii'i be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawaii'i. After being added back in 1978, the law is part of Hawaii's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

**The Law of the Splintered Paddle is also on Kamehameha Schools website**, so they should want to help make Big Island roads become safer and not add to the traffic and possible traffic death toll problem. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ting-true-200-years-after-k>

**Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious Resource and Infrastructure issues. Please read the articles below.**

### **The Big Island Doesn't Have the Resources and Infrastructure for Another Resort**

Please see the articles below because the Big Island doesn't have the resources or infrastructure to safely add another resort development on island and these other NEWS and Research articles prove this point.

- 1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

- 2) Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

- 3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

- 4)"What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables->

5) "The overwhelming plastic waste Hawaii visitors leave behind  
By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A county commission drafts ordinance aiming to ban recyclables at West Hawaii landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawaii County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill>

7) "Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawaii Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters  
Hawaii Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "BIG ISLAND NEWS HECO restores power after initiating emergency outages on Big Island by: Elizabeth Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) "LOCAL NEWS

HECO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawai'i's power system from its water system, said Kawika Uyehara, deputy director of Hawai'i County's Department of Water Supply." [https://www.hawaii-publicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-serve-water-amid-power-outages](https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-serve-water-amid-power-outages)

16) U.S. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues  
By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "we're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) NewsHawai'i County issues mandatory 25% water restriction for North Kona  
August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawai'i Water Supply Closely Monitored As Severe Drought Continues  
by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

20) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large\\_generators\\_are\\_offline/](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large_generators_are_offline/)

21) "NewsHawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will damage Keauhou Bay coral and marine life and, Big Island resources and infrastructure are currently being negatively affected from the development that is on island already, and there are years of new development that have already been approved, before having safe resources and infrastructures for new developments.

With these scientifically proven articles by some of the most professional scientists in the world, they say the a serious population increase, as well as development and resort runoff that happens because of parking lots, and... with all coastat developments, it will be dangerous for Keauhou Bay to be development because it will damage the marine ecosystems in the area.

Please, save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools because all of these articles prove it would be extremely damaging to the waters at Keauhou Bay.

Thank you,

Sincerely,

Deborah Sevy

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**From:** Rosanne Shank <[REDACTED]>  
**Sent:** Saturday, July 27, 2024, 8:41 PM  
**To:** 221053-01 KS, Keaouhou Entitlements  
**Subject:** Keaouhou Bay Development  
**Categories:** Yellow Category

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort.

A Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keaouhou Bay as stated in the researched articles below.

Please, DO NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.

#### ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

#### FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED

The green sea turtle is federally protected and can be seen in Keaouhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Allowing this development WILL POLLUTE Keaouhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keaouhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i

Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

#### THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keauhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keauhou Bay will likely be changed forever.

This information is from a NOAA Scientist; "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'! That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keauhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keauhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keauhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project.

Thank you for considering my concerns-

Rosanne Shank



## Jennie Shield

Good afternoon, Please find attached a comment letter on the Kamehameha Schools – Keauhou Bay Management Plan Draft Environmental Impact Statement. Thank you,

---

**From:** Jennie Shield <[REDACTED]>  
**Sent:** Thursday, July 18, 2024 1:02 PM  
**To:** 221053-01 KS Keauhou Entitlements  
**Cc:** [REDACTED] Mark S. Laska, Ph.D.  
**Subject:** Comment Letter | Kamehameha Schools - Keauhou Bay Management Plan Draft EIS  
**Attachments:** Grt\_Eco\_KeauhouBayManagementPlanDraftEIS\_Comments.pdf

**Categories:** Green Category

Good afternoon,

Please find attached a comment letter on the Kamehameha Schools – Keauhou Bay Management Plan Draft Environmental Impact Statement.

Thank you,

**Jennie Shield**  
Western Regional Director  
sheherr (What's this?)



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July 18, 2024

**County of Hawaii i, Planning Department**

Alex Roy

Phone: (808) 961-8140

Email: [Alex.Roy@hawaii-county.gov](mailto:Alex.Roy@hawaii-county.gov)



Keauhou Bay Management Plan Draft Environmental Impact Statement Comments

Dear Mr. Roy,

I would like to start by introducing myself, I am the founder and President of Great Ecology, a leading ecological consulting and landscape architecture firm. Formed in 2001, Great Ecology has used ecological approaches to address environmental challenges and regulations for over two decades now. I have over 30 years of experience as an expert technical consultant on over 1,400 projects across the United States and internationally. My technical specializations include habitat restoration, ecological planning and design, and environmental strategy.

The purpose of this letter is to provide comments on the Kamehameha Schools, Keauhou Bay Management Plan Draft Environmental Impact Statement (DEIS). It is the responsibility of the party preparing the DEIS to provide substantial evidence to support the analysis and conclusions of the DEIS; however, this DEIS falls short of that. The majority of the DEIS seems to be a series of unsupported conclusions and not a DEIS that is supported by substantive research or analysis. The comments below are not all-inclusive but are intended to highlight the deficiencies of the DEIS.

**Congestion and Use Conflict**

The DEIS argues that Keauhou Bay (Bay) suffers from "congestion" and conflicts with incompatible uses, however there is no study analyzing congestion (i.e., number of users over a given time span such as daily, weekly, monthly, etc. basis). Additionally, the DEIS does not evaluate how the Project, implementation of the Keauhou Bay Management Plan on approximately 29 acres of Keauhou Bay, would reduce the existing number of users or implied incompatible uses, other than reducing access to publicly owned space. Without the required analysis, the claim that the Project would reduce congestion and/or use conflicts is unsupported. In actuality, it may be reasonable to conclude that the Project would *increase* congestion and use conflicts at Keauhou Bay with the proposed construction of 43 homes, cultural center, commercial center, and commercial kiosks. The DEIS identifies the launch ramp stretch as an area of greatest congestion, however it proposes to add a substantial number of visitors and vehicles to that area, thereby increasing congestion further. The DEIS fails to provide any explanation as to how adding thousands of people and vehicles to areas identified as having the greatest congestion will be reduced by the Project. There is also no analysis in the DEIS of the impact on local plants or wildlife from the likely increased usage of the Bay because of the Project. Lastly, there is no analysis of future impacts on the existing uses of the Bay with the addition of rental kayaks and stand-up paddle boards to the Bay. The reasons listed above demonstrate that the DEIS has failed to provide the required analyses and supporting evidence.

**Traffic Impacts**

The Project proposes to build a resort with 43 multi-bedroom houses, commercial kiosks, a cultural center, a commercial/retail center, as well as a road connecting the north and south ends of the Bay. This will result in a large amount of vehicle trips per day, however there is no study analyzing traffic impacts. There is also no evidence of what the amount of reduction on the existing roadways would be with construction of a new road. The DEIS also fails to address how the Project would mitigate increased traffic impacts. Lastly the DEIS claims that the Project will reduce traffic impacts but does not provide any substantiation or studies to support its conclusions.

### **Noise Impacts**

The DEIS fails to adequately address noise impacts from the Project. The majority of the project will remove historically forested areas, from which the only noises emanating are natural sounds. There are no studies of the existing noise levels in the area or studies of what increased noise impacts to the area will be, except statements that are made without any supporting evidence. It is obvious that the Project will alter existing conditions related to noise via a large increase in human and motorized activity in and around the Bay.

### **Air Impacts**

The DEIS fails to address air impacts from the Project. As mentioned previously, a large number of additional motorized vehicles and vessels will be added to the area. However, there have been no studies of existing air quality conditions relative to the projected conditions with more vehicular traffic.

### **Historical Runoff Issues**

The DEIS does not address how the Project will address manage flooding on Kamehameha II Drive caused by Project lands. The DEIS does not address that there were two sand volleyball courts historically. The second court was located in the publicly owned land between the seawall and existing volleyball court. When the Project proponent cleared lands to construct the existing parking lot and boat storage area, stormwater drainage was considerably affected. As a note, the DEIS fails to address the permit status of the existing boat storage and parking lot. The Project proponent failed to make repairs to the second sand volleyball court and the DEIS fails to address what appears to be unpermitted development of the current northern parking lot and boat storage lot, or their environmental impacts. The DEIS does not address the historical catchment area north of the sand volleyball court, which historically helped to capture runoff from the northern area where the new parking lots and boat storage were added. The Project proponent has failed to maintain the catchment, which has caused excess runoff from the area resulting in damage to publicly-owned property. The DEIS needs to address the permit status of the apparently illegally constructed parking and boat parking lots including the lack

of environmental review, the historical runoff issues from the Project proponent lands that have damaged publicly owned property, and the strategy to mitigate existing issues.

### **Runoff Impacts from Increased Hardscape**

The Project fails to address additional runoff impacts from increased hardscape. The Project proposes to remove existing native vegetation in favor of construction of the resort, commercial kiosks, and commercial/retail spaces. According to the Project maps, it appears that about 15-20 acres of native vegetation will be removed and replaced with mostly hardscape. There is no analysis of the current conditions or of the increased flow and rate of runoff from the increased hardscape. The same conclusion can be drawn here – that the DEIS has failed to provide the appropriate analysis and documentation to support its conclusions.

### **Toxicity and Eutrophication**

The Project fails to study, analyze, and/or provide projection as to increased toxicity and eutrophication impacts to Keauhou Bay. The decision to position the roadway closer to the Bay increases the potential for toxic pollutants entering the Bay and impacting the Bay's ecosystem. There is no study on the existing toxicity of runoff to the Bay from nearby roadways nor is there a study or projection of the concentration or ecological impact of the Project on future runoff to the Bay. Projects such as resorts with houses, pools, lawns etc. have increased runoff of nitrates and phosphates, which are known to cause eutrophication to water bodies. Golf courses have the potential to release substantial amounts of nitrates and phosphates through runoff. The forested area that the golf course drains into is proposed to be removed by the Project. The DEIS fails to analyze existing conditions as well as impacts of removal of the forest and the construction of the resort and roads on future releases of eutrophic chemical to the Bay. The DEIS is failing to provide the supporting evidence and documentation required in a DEIS.

### **Proponents Failure to Maintain Existing Facilities**

The DEIS does not analyze the long history of the Project proponent's failure to maintain existing properties. The DEIS suggests that the long-term maintenance issues related to the Project proponent's properties are due to lack of income from the properties and that in the future, maintenance will improve. According to the Project proponent's website their endowment is valued at \$14.6 billion suggesting lack of funds should not be an issue contributing to lack of maintenance. Additionally, the Project proponent has historically received funds from the Keauhou properties through the boat yard rental, parking, canoe club, and building rentals. There is little evidence to support that if the Project is approved, the Project proponent would conduct the required maintenance. An example is the existing seawall owned by the Project proponent, which has been in serious disrepair for over a decade with pieces falling into the ocean and no repairs made. As a result, the DEIS should consider the very likely scenario that the Project proponent may continue to act as it has historically and fail to maintain its properties.

### **Public Access**

The Project appears to block public access across publicly owned property. According to the maps attached to the EIS, there is publicly owned property extending from the end of Kamehameha III Drive to the boat dock area. There is currently a path that extends from the end of Kamehameha III Drive to the boat dock area that allows access to the boat dock area, however, the Project proposal maps appear to block the publicly owned path. It appears that the Project proposes to block access to the public across publicly owned property.

### **Destruction of the Sand Volleyball Courts**

There were two sand volleyball courts located on the east end of Keauhou Bay historically. According to locals, the existing volleyball court located at the western edge of the Project proponent's property has been in continuous use by the public. Due to the limited availability of volleyball courts locally, this is the primary one used by local adults and children. Until the Project proponent cleared land to create the northern parking lot and boat parking, there was a second court that was similarly used. The Project proponent proposes to eliminate both volleyball courts and instead

plant grass in the area as "open space." The DEIS does not analyze the impacts of eliminating the existing volleyball court nor the impact on the local community who enjoy it. The Project does not include replacing the second volleyball court that was damaged by the excess runoff caused by prior land clearing. Lastly, a large grassy area is incompatible with historical and current uses of that area. Historical photographs show the East end of Keauhou Bay as sandy beach all the way up to the base of the hill to the East of the existing volleyball court.

The analysis presented to support the claims made in the DEIS is insufficient, therefore the DEIS should not be certified until substantial evidence to support these claims is provided in a supplemental DEIS to meet the requirements and rules of NEPA (CEQ Regulations (40 CFR 1502.9(b))) for certification.

Sincerely,



Mark S. Laska, Ph.D.

President and CEO

## Pamela Small

I am opposed to the development of Keauhou Bay. Pollution runoff from the new pavement will be devastating to the marine ecosystem. The building process will create pollutants which could subsequently destroy the existing reef.

There are archeological considerations to contend with. As a landing spot of the original Hawaiian people, there are artifacts scattered throughout the area.

Parking lots and retail buildings are NOT what Keauhou needs.

## Jun Sogi

My family has lived in Hawaii for 125 years. I oppose building a hotel in Keauhou Bay. It is inappropriate because traffic and parking is very bad. The bay and beach is already overcrowded. The last thing needed is 100 haole tourists dripping sun lotion in the already contaminated oil fuel filled water. The current disrespect Kam schools pays to its former King is disgraceful and a hotel will make it worse. The EIS is a true sham filled with empty platitudes. Its BS. No more tourists! No more hotels!

## Helene Spencer

I strongly oppose the plan of Kamehameha Schools as they should be preserving this important cultural area as open land and cultural center to educate as they promise. They have an abundance of other commercial properties they can profit from. This area should be preserved w no housing for the affluent! My grandson also works w the manta ray dives at t Keauhau harbor and believe that this would negatively affect that business. Mahalo

## Lisa Sterritt

As a nearby resident of this proposed project, I am strongly against its continuation. Direct descendants of King Kamehameha have stated their opposition to this during previous public meetings. Ali'i Drive and Kaleiopapa St. traffic is already noisy and dangerous as drivers violate speed limits continuously. The addition of even more resorts only increases the issues of affordability for local Hawaiians and residents who struggle with housing, high energy costs and goods and services priced out of their reach.

It will also displace an important gathering place for the young people of the island who are learning canoeing through the keauhau bay canoe club.

Please stop this project. It is not needed, will over populate an area already ill-equipped to handle traffic noise and volume, and destroy the tranquility of the area.

Thank you.

**From:** Bryn Stites <[REDACTED]>  
**Sent:** Friday, July 26, 2024 11:21 AM  
**To:** Alex.Roy@hawaiicounty.gov; 22.1053-01 KS Keauhou Entitlements;  
Keauhoubay@ksbe.edu; Planning@hawaiicounty.gov  
**Subject:** Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT!

**Categories:** Green Category

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keauhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keauhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is **scientifically proven** that developments pollute nearby waters both **during and after development**.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have **ALWAYS** polluted the water in **EVERY** coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keauhou Bay is their habitat and this development **WILL be CHANGING an Entire Ecosystem**.

#### **ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT**

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keauhou Bay.

The Green Sea Turtle swims in Keauhou Bay weekly and the monk seal has also been seen swimming and resting in Keauhou Bay. Both of these marine animals are on the endangered species list.

#### **Endangered Species Act**

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

#### **FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED**

The green sea turtle is federally protected and can be seen in Keauhou Bay weekly.

The following article that states: "**POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES**"

#### **Why does Hawaii have a runoff problem?**

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

**Allowing this development WILL POLLUTE Keauhou Bay.** The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keauhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral,

monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen **because developments have been shown to ALWAYS pollute the water is that is nearby.**

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

### **THE ENDANGERED MONK SEAL WILL BE AFFECTED**

Keaouhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keaouhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

**Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keaouhou Bay will likely be changed forever.**

This information is from a NOAA Scientist; **"Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'!"** That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

**Keaouhou Bay is the monk seals and the green sea turtle's habitat.** Allowing a bungalow resort to be developed in Keaouhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. **By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.**

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to **protect the land around Keaouhou Bay** from developments that destroy the habitat of these endangered species with pollution and runoff.

**Does this EIS have any reports on the endangered species that frequent Keaouhou Bay? This is their habitat and it needs to be "conserved".**

Under the **Conservation Program** there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keaouhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keaouhou Bay and the surrounding area during the building phase of this enormous project.

### **GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS**



diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

**Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?**

This needs to be fully assessed because **you will be changing an entire ecosystem** to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

**FURTHERMORE:** "If there are **toxic algal blooms**, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

## ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

**Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?**

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

**The article below is from NOAA regarding motor vehicle engines and pollution to the sea.**

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run

off into waterways, harming fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

**Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects**

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a new report from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20says%20a%20new>

**The Impact Of Stormwater – Car Emissions**

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwaterhepherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

## NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

**Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?**

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation

Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

### How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

### What is ocean noise?

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats."

<https://oceanservice.noaa.gov/facts/ocean-noise.html>

### LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is **a lot bigger** than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

**This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states,** "...runoff is a significant source of harmful nitrogen pollution that continues to grow..."

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.



[pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species.](#)

Article by Environmental Evidence, "**Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide.**" <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,service%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. **Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.**"

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "**Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)**"

**Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival"** [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

#### **It's Been Proven Resort Developments KILL Marine Life**

This article by MarinBIO states, "**Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change.** Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. **This occurred in a relatively short time considering that the experiment lasted less than three weeks.** The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

**The ecosystem is fragile and interconnected as is stated in this article:** "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "**Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage.** Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area,



By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

**"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction.** Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:te xt=Aquaculture%20will%20alleviate%20some%20fishing,t0%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, "**Coral reefs and coastal tourism in Hawaii Coral reefs are popular** for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, **coral reefs both attract and suffer from coastal tourism.** Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhalHjAnWAq453tRgN0AJWeI9nrR3ZotV0PYGzA5lc\\_H001zcHNIP3AShncgKRy6\\_vKLpW49dbmBYoXSg3Y1MgQIGBZsapidGUHi7O1SLbu9x5P3xED4KxI4T0sJlvGQ1a72Zr3rUbraxpodId2AoNISMWSuxB7JEDqjJ8OGJpx71TJWdCFxvFKlIZYeNd cJj3Sw\\_dnaUg5IZhcjPBDImmah15yqt5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhalHjAnWAq453tRgN0AJWeI9nrR3ZotV0PYGzA5lc_H001zcHNIP3AShncgKRy6_vKLpW49dbmBYoXSg3Y1MgQIGBZsapidGUHi7O1SLbu9x5P3xED4KxI4T0sJlvGQ1a72Zr3rUbraxpodId2AoNISMWSuxB7JEDqjJ8OGJpx71TJWdCFxvFKlIZYeNd cJj3Sw_dnaUg5IZhcjPBDImmah15yqt5Q%3D&tracking_referrer=abcnews.go.com)

## **INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS**

**Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?**

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

**Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?**

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. **Worldwide, hotels produce almost 300,000 tonnes of waste each year.**" <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keaunoh Bay. On Hawaii's Island, we are already struggling to meet the increasing need for resources and infrastructure.

## **Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawaii'i landfill**

September 17, 2023

The West Hawaii'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawaii'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

## **A County commission drafts ordinance aiming to ban recyclables at West Hawaii'i landfill**

By Megan Moseley September 6, 2023

Hawaii'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawaii'i County Director of Environmental Management, told commissioners the West Hawaii'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

### Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawaii's government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

### Drought Conditions On Hawaii's Island Prompt Water Supply Message

by Big Island Video News  
on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawaii's island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawaii's island is under "Moderate Drought" conditions, according to the latest information from the U.S. Drought Monitor. There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawaii County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

### From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawaii%CA%BBi-island-prompt-water-supply-message/>

U.S.

**Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to significant droughts, and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the world's largest surfing wave pool opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe."

"**We are in a water crisis, that has to be made very clear,**" Wayne Tanaka, director of Sierra Club of Hawaii, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

#### **UPDATE: HELCO asks for continued energy conservation**

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity use is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

**Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.**

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

#### **Big power supply problems continue to plague Hawaii Island**

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

**The company explained that it faces an "extremely tight" supply of power at peak use periods,** especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

## Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

**-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island**

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

## FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES

### A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawai'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new

report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%. "Watch the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "**Hawaii Island has most traffic fatalities in state**. This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

**"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here,"** he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

**The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.**

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: **All of these roads only have two lanes!**

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr.  
<https://www.youtube.com/watch?v=-FQSsnPDj8>

**Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.**

**Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:**

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

**"That's just Big Island traffic,"** is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

### **MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC and WASTEWATER:**

#### **1) Hawaii Deals with Burgeoning Waste Management Problem**

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

#### **2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.**

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

#### **3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste** Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

**4) "What happens to Hawaii Island's trash and recyclables?"** BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

**5) "The overwhelming plastic waste Hawaii visitors leave behind**

By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

**6) "A County commission drafts ordinance aiming to ban recyclables at West Hawaii's landfill"** By Megan Moseley September 6, 2023 · 1:00 AM HST

\* Updated September 6, 2023 · 2:02 PM

Hawaii's County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

**7) "Hawaii's County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST**

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

**8) "Hawaii's Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY**

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/>

**9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant"** Kealahoe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

**10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii's Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST**

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii's Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

**11) "Kona coast faces stark wastewater tradeoffs, Current situation**

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

**12) "HELCO restores power after initiating emergency outages on Big Island by:**

Elizabeth Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

**13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island** February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

**14) HELCO issues rolling power outages around Big Island** by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night."

<https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

**15) "Here's how power outages can have repercussions for Hawaii's water supply** Hawaii Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawika Uyekhara, deputy director of Hawaii County's Department of Water Supply. " <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

**16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

**17) News Hawaii'i County issues mandatory 25% water restriction for North Kona** August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

**18) Hawaii Water Supply Closely Monitored As Severe Drought Continues**

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) — With an ongoing drought on the island of Hawaii, the Hawaii County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-CA%BBj-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

**19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."**

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/?rdt=52660)

**20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators**

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

#### **HISTORICAL AND CULTURAL SIGNIFICANCE:**

##### **The Law of the Splintered Paddle**

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, **the law is part of Hawaii's State Constitution today.**

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

**The Law of the Splintered Paddle is also on Kamehameha Schools website.** The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

**Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.**

#### **IN CONCLUSION**

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keauhou Bay and "The Endangered Species Act of 1973 (ESA or "The Act", 16 U.S.C. § 1531 et seq.) is the primary law in the United States for protecting and conserving imperiled species. Designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President Richard Nixon on December 28, 1973. The [Supreme Court of the United States](#) described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation".<sup>[1]</sup>" [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973)

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other. This land MUST be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come.

In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved. These issues MUST be solved before considering another resort development on Big Island.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

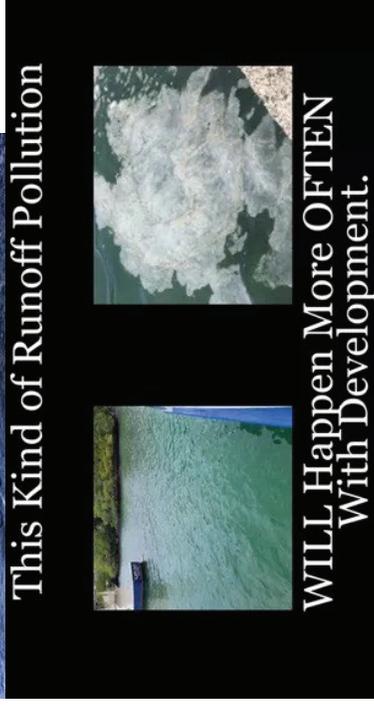
The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is NOT suitable for this kind of development for both environmental and infrastructure reasons.

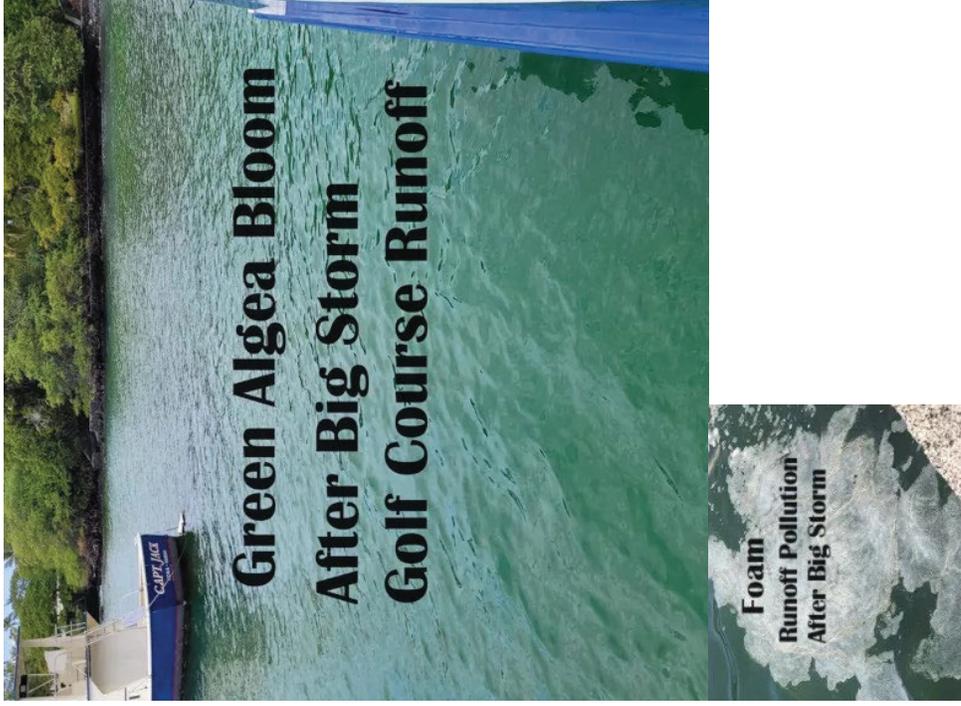
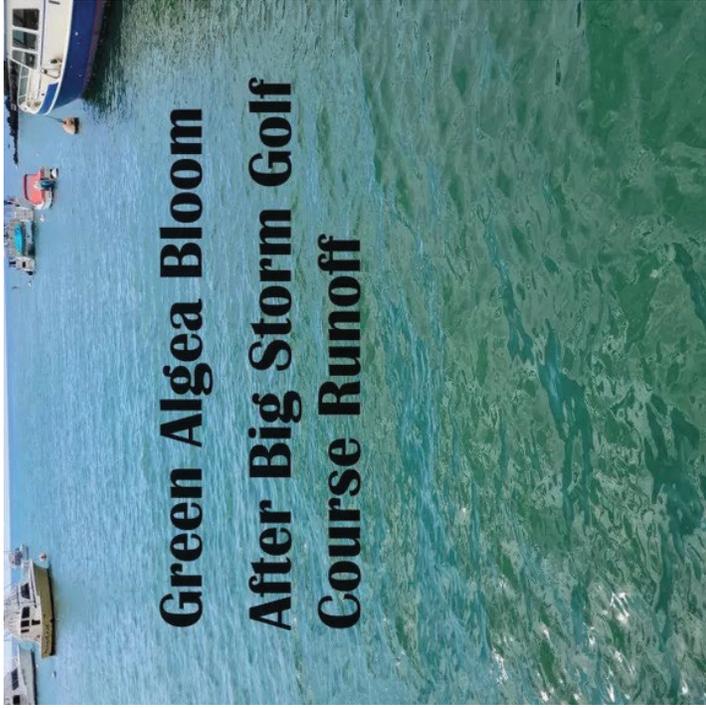
The cost of what stands to be lost is far too high to allow this to happen.

Please save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.

Mahalo,

Bryn Stites







## Rollin Stonebraker-Soles

Dear Concerned, Environmental Concerns include : \*Water use greatly increased if Resort is successful. My understanding is that our area's water supply is already suffering a capacity issue with little hope of improving. \*Within Keauhou Bay waters exist significant spots measuring cool temperatures due to cold water entry from higher elevations. These cooler 'patchwork' are critical for marine life. How would development affect current water temperatures from spot to spot within the Bay? \*Wastewater capacity. The current facility is under investigation to determine its impact on Honokohau Harbor and neighboring waters. Can KSBE find a less impactful use than a Resort/Restaurant? \*Is there a development idea that would be much less impactful to our already strained services? \*Coral colonies within and out of the Bay are in critical condition. I thought we were all concerned and wanted to enact uses that benefit re-growth of this valuable habitat? How does KSBE's development fit with its Natural World cultural mission? Afterall, the humans historically inhabiting this region depended on a rich natural resource. KSBE cannot separately honor this area's human history without doing the same in similar manner the natural wonder that once existed here. Ecological: Another Resort in this area will fail. Majority of Tourists head north of the Airport. Note the failed Resorts of the past in this area, Kahaolu in particular. What guarantee/demand does KSBE have that a resort development in this area will be successful in 15-20 years? KSBE track record for developing resort ready operations is not a sure success. In this case, the KSBE property has been poorly managed over a very long time. Now, Kamehameha Schools wants to justify this mismanagement by including a "hail mary" for income production, e.g. A Resort. A philosophy change at KSBE is needed, especially in these rural settings. Instead of Resort Thinking: What investment would benefit our graduating students the most? (hint, not a another resort). What investment would help stem the loss of talented young people from our island? What investment ensures a future, long term economic benefit? What investment is best for talent retention on the Big Island? Even, attract young talent from outside the Big Island. KSBE with its considerable resources should be a SOURCE of inspiration, research, and teaching. You have the connections to properly develop a longer thinking set of objectives for the Big Island. KSBE is based in Oahu, so it's natural that it would focus its attention there. Yet, investment on the Big Island COULD be such that young people (our future) from Oahu, Maui, Kauai would WANT to move to the Big Island. As Ms. Harman at KSBE quoted that "change can be difficult", changing KSBE's mission to actually support its student by doing the right thing for the long term will perhaps be difficult for KSBE, but the right thing at this time. A resort does not provide an incentive for young talent to remain on the Big Island. Surely an entity like KSBE can imagine BETTER than the plan presented for Keauhou Bay improvements/development. Nor does a Resort improve the environmental health of this valuable cultural site. Thank you for reading, Rollin Stonebraker-Soles

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Thank you for reading, Rollin Stonebraker-Soles

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**From:** Rollin Stonebraker-Soles <[REDACTED]>  
**Sent:** Thursday, July 18, 2024 1:24 PM  
**To:** [REDACTED]; Keauhoubay@ksbe.edu; [REDACTED]  
**Subject:** Land Use Best for the Community Future  
**Categories:** Yellow Category

Dear Concerned,

**Environmental Concerns include:**

- \*Water use greatly increased if Resort is successful. My understanding is that our area's water supply is already suffering a capacity issue with little hope of improving.
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A philosophy change at KSBE is needed, especially in these rural settings. Instead of Resort Thinking:

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## Rollin Stonebraker-Soles

Dear Folks, Attached is an old, but still valid concept for Community success. I thought perhaps you would find it useful. Do the right thing for the long term, Rollin

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**From:** Rollin Stonebraker-Soles <[REDACTED]>  
**Sent:** Thursday, July 18, 2024 1:58 PM  
**To:** 221053-01 KS Keahou Entitlements; keahoubay@ksbe.edu; [REDACTED]  
**Subject:** Re: Land Use Best for the Community Future  
**Attachments:** civic ecology white pager.doc  
**Categories:** Yellow Category

Dear Folks,  
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Do the right thing for the long term, Rollin

---

**From:** Rollin Stonebraker-Soles [REDACTED]  
**Date:** Thursday, July 18, 2024 at 1:24 PM  
**To:** "keahoubay@g70.design" <keahoubay@g70.design>, "keahoubay@ksbe.edu" <keahoubay@ksbe.edu>, "[REDACTED]" <[REDACTED]>  
**Subject:** Land Use Best for the Community Future

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Thank you for reading, Rollin Stonebraker-Solies

## **CIVIC ECOLOGY: A COMMUNITY SYSTEMS APPROACH TO SUSTAINABILITY**

Many communities and institutions have begun to realize that attaining sustainability requires careful attention to planning, constructing, and managing a comprehensive framework of community systems. Energy flows, local food production systems, local-global economic webs, social networks, community governance, resource sharing networks, and integrated land use and transportation are just some of the community systems that, when synergized in a specific place, constitute a complex human ecosystem or "Civic Ecology."<sup>7</sup> Nurturing this web of relationships and flows affords communities opportunities to enhance their local wealth (environmental, economic, and cultural), resilience, and competitiveness, and to take control of designing and managing their future. The Civic Ecology (or "community software") approach, provides a context for the community's future "hardware": green building and sustainable infrastructure.

This 'white paper' describes the principles and benefits of Civic Ecology, as well as a planning process that communities can use to design sustainable, community-scaled systems. This approach uses The Natural Step backcasting process to help communities envision a desired future and create integrated systems to achieve multiple benefits. There are many communities around the US that exhibit varying degrees of Civic Ecology, including Portland, Ballard (Seattle), and Burlington (VT). (One advanced example is Chestnut Hill, a 300-year old community in Philadelphia, Pennsylvania, animated by a web of mature Civic Ecology flows and systems.)

### **Civic Ecology Principles**

Communities with a strong or burgeoning Civic Ecology all share several essential qualities, which can be translated into five principles. Specifically, Civic Ecology:

1. **Employs a whole systems approach.** Civic Ecology is the web of flows that animates community life. All great, enduring communities – whether rural farming villages, suburbs, urban neighborhoods, or institutions – have a refined array of locally-based systems that facilitate resource, economic, and social flows. Moreover, these flows cross sectors; that is, economic, ecological, and social systems are intertwined rather than set in opposition.
2. **Focuses on place.** The systems of flows must be focused within the community, and, to the greatest extent possible, must provide locally-produced energy, use local resources, enhance community economic multipliers, and draw upon social capital.
3. **Requires a new social contract.** Presently, paying taxes and voting in exchange for services are viewed as the defining factors of citizenship. Civic Ecology draws upon a community's social capital by requiring active civic engagement in the creation, management, and monitoring of community systems.
4. **Matches needs and assets.** A community's capacity to create a positive future is dependent on the assets and strengths it has developed over time. The whole systems approach seeks to understand problems in terms of their root causes and

broader needs. Matching assets to needs is at the heart of creating community systems that will result in an enduring Civic Ecology.

5. **Is dynamic.** Communities are continuously-evolving organisms. Because of this, Civic Ecology must be designed as a “learning ecology,” – a web of systems that adapts based on knowledge gained through constant vigilance and monitoring.

#### Civic Ecology Benefits

Communities that have and continue to nurture their Civic Ecology enjoy five essential benefits:

1. **A high degree of control** over their assets and future by virtue of the fact that they themselves create both a community vision and the systems necessary to implement, and chart progress toward, that vision. That these systems rely largely on locally-based resources enhances community ownership and control.
2. **Enduring wealth.** Because Civic Ecology integrates systems flows across sectors, it is possible for a community to realize the multiple benefits of ecological, economic, and social wealth. The common alternative pits the economic, ecological, and social camps in “zero-sum game” opposition, resulting in economic growth at the expense of ecological and social impoverishment.
3. **Resilience.** Integrated systems that are locally created and managed generally result in richness and redundancy. An example is a diverse economic base of locally-owned businesses and local resource inputs that is less affected by rising transportation and labor costs. These businesses will not “up and leave” the community for a better deal elsewhere because they are **of** the community.
4. **An enhanced sense of place.** With globalization, and the increasing homogeneity that accompanies it, those communities that are resilient, distinctively local, open, and adaptive – and ultimately unique – will succeed as valued places to live, work, and play.
5. **A deep sense of community:** Citizens of communities with a strong Civic Ecology share in learning about their community and envisioning its future. They also collaborate on designing the systems to implement that vision and labor together to keep the community on course. They work with strangers, friends, and occasionally enemies to create a collective future for themselves and the next generation. In doing so, they become citizens in-full and experience a true sense of community.

#### The Process of Civic Ecology

To begin the process of creating a Civic Ecology, a community must ask itself five essential questions:

1. **Where are we now?**
2. **Where do we want to be in 10, 20, 50 years and beyond?**
3. **How do we get to where we want to be?**
4. **How do we know if we are getting there?**
5. **Who wants to help answer these questions?**

Answering these questions requires that communities embark on a process that consists of the following **CIVIC** tasks: **C**onvening, **I**nvestigating, **V**isioning, **I**mplementing, and **C**harting.

- **Convening:** The community must first convene a Civic Ecology working group consisting of stakeholders from all sectors of the community: business, non-profits, institutions, governance, citizens, and activists. These stakeholders must be willing to put in the time and effort necessary to see the process through and most importantly, work together on behalf of the community. The group must be trained in systems thinking in order for them to see their community and its future in a different way: as a web of interrelated systems and flows.
- **Investigating:** In this task, the working group investigates what works, what does not, what systems exist, and what needs the community has. This assessment identifies problems and their root causes as well as leverage points to effect change.
- **Visioning:** As the first step in a process called “backcasting” (see The Natural Step), the community asks where it wants to be in 10, 20, 50 years and beyond. (For contrast, it may also be useful to predict where the community will be if existing trends are projected into the future (forecasting).) The outcome of this visioning can take a variety of forms but must always build upon the community’s shared core values.
- **Implementing:** Led by the Civic Ecology working group the community creates the community-scaled systems that it believes will help it realize its vision (and thus “backcasts” from their vision of the future). Some systems may be new, others enhancements of existing systems that seem to be working. In either case, the systems must bring identified assets to bear in satisfying identified needs. The group must also acknowledge barriers, assign responsibilities, and delineate specific tasks for implementation.
- **Charting Progress:** In this final, but never-ending task, the working group and community create a series of indicators that, when measured over time, will help the community assess progress towards realizing its vision. Periodic assessments and adjustments ensure that the Civic Ecology is truly a learning ecology.

Civic Ecology’s whole systems approach will yield a snapshot of the community’s desired future, the “software” necessary to achieve that future, and the ability to chart whether means and ends are in alignment. It provides the fundamental context necessary for making decisions about capital investment in “hardware” (buildings, streets, schools, parks, and utilities), economic revitalization, business growth and retention, main street improvements, and virtually anything related to the common good.

#### “How is your Civic Ecology?”

Answering this question is the ultimate community building exercise. It requires citizens to learn about their place, its strengths, its weaknesses, and its possibilities. It requires them to do it together, continuously, forever. It also requires new eyes (a whole systems approach) and constant vigilance. The rewards are many, and mostly for generations too young or not present to participate.

October 5, 2006 by Tim Smith

**Timothy W. Smith, AIA, AICP** is an architect, city planner and principal with SERA Architects in Portland, Oregon. Mr. Smith is Director of Urban Design and Planning for SERA and Team Oregon, an L.L.C that focuses on sustainable development in the Pacific Rim. He holds graduate degrees from the University of Michigan and the University of Pennsylvania where he taught urban design from 1986 until 1994. His work has received numerous professional awards including a *Progressive Architecture Research Award*, a *Pennsylvania Planning Association Award* and the *International Cities Design Competition* and the *Community Solutions Competition*, both jointly sponsored by the American Institute of Architects and the International Union of Architects. He is currently Vice President of the Portland Planning Commission and has served on the Portland Mayor's Central City Roundtable, the Portland chapter of the American Institute of Architects (AIA) Urban Design Committee and as President of the Chestnut Hill (Philadelphia, PA) Land Use Planning and Zoning Committee. Mr. Smith has lectured extensively on the concept of Civic Ecology and is currently working on a book on the topic.

**From:** Umberto Taormina <[REDACTED]>  
**Sent:** Saturday, July 20, 2024 2:21 PM  
**To:** 221053-01 KS Keauhou Entitlements  
**Subject:** Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT

**Categories:** Green Category

To whom it may concern,

Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keauhou Bay.

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "*What is the biggest source of pollution in the ocean?*" by NOAA, National Oceanic and Atmospheric Administration, states, "*When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides.*" It also states, "*Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff.*"

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "*Putting the Earth in Play: Environmental Awareness and Sports*," shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endangered these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,

Umberto

**From:** Lisa Thatcher <[REDACTED]>  
**Sent:** Saturday, July 20, 2024 5:58 PM  
**To:** 221053-01 KS Keauhou Entitlements  
**Subject:** NO to bungalow clusters at KBay

**Categories:** Green Category

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Sincerely,  
Lisa Thatcher  
Kailua Kona

Nancy Thornes

To whom it may concern,

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Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "*What is the biggest source of pollution in the ocean?*" by NOAA, National Oceanic and Atmospheric Administration, states, "*When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides.*" It also states, "*Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff.*"

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "*Putting the Earth in Play: Environmental Awareness and Sports,*" shares that the golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are being held off from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endanger these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,  
Nancy Thornes

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**From:** NANCY THORNES <[REDACTED]>  
**Sent:** Saturday, August 3, 2024, 10:36 AM  
**To:** 221053-01 KS Keauhou Entitlements  
**Subject:** Keauhou Bay

**Categories:** Yellow Category

To whom it may concern,

Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keauhou Bay.

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This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,  
Nancy Thornes

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**From:** keahoubay <keahoubay@ksbe.edu>  
**Sent:** Tuesday, August 6, 2024 11:15 AM  
**To:** heather tribolet  
**Subject:** Re: [EXTERNAL] Attention County of Hawaii Planning Keahou Bay EIS Comment

Yellow Category

Aloha e Heather,

Thank you for your comments concerning the Keahou Bay Management Plan, Draft Environmental Impact Statement. Your comments have been received and administratively recorded.

Comments received during the 45-day public comment period will be reproduced in the Final Environmental Impact Statement, and substantive comments addressed.

Since you also provided a copy to the County of Hawaii and our planning consultant, G70, we will not be forwarding them a duplicate copy.

We appreciate your involvement and contribution to the environmental review process. Your input is invaluable in helping us develop a management plan that reflects the needs and concerns of our community.

Thank you once again for your engagement and commitment to the future of Keahou Bay.

Mahalo,

The Keahou Bay Project Team

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**From:** heather tribolet <[REDACTED]>  
**Sent:** Tuesday, June 25, 2024 9:06 PM  
**To:** keahoubay <keahoubay@ksbe.edu>; Alex.Roy@hawaiicounty.gov <Alex.Roy@hawaiicounty.gov>; KeahouBay@g70.design <KeahouBay@g70.design>  
**Subject:** [EXTERNAL] Attention County of Hawaii Planning Keahou Bay EIS Comment

**CAUTION: This email is from an outside sender. Do not click on links or open attachments unless you recognize the sender and know the content is safe.**

Dear County of Hawaii Planning,  
Please, Do NOT risk polluting the water in Keahou Bay by allowing Kamehameha Schools to develop their bungalow project, because it is proven that developments will ALWAYS have rain runoff that will pollute the bay constantly during development and after.  
Please, read the Scientific articles below that prove that development ALWAYS pollutes the water in every coastal developed area.

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keahou Bay will be devastating to the coral, reef fish, and all Aquatic life there, and even the Manta Rays that go there every night to eat zooplankton from the Manta Ray tours at night, and eat it during the day as well because they need to eat 5 times their body weight in zooplankton daily.

If you allow this bay to be a development you will be allowing all types of marine life to die and there is NO WAY to stop this from happening because runoff water from development can't be stopped. It is what happens in ALL coastal developments. Please, read these articles that Scientifically Prove this point:

Reason #1 a Resort Development WILL Severely Pollute Keahou Bay  
Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii". Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide...

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban runoff). "<https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event>:"

<https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event>:"

in the food chain" <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation.>

Here is a research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton. There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation." [https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3\\_6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3_6_chapter12_257-274.pdf)

The above articles show that development of Keaouhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this will cause the manta ray food source to disappear. This will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on this tour to survive.

Here is another article that proves runoff from development in this area will hurt and kill plankton. by **Frontiers in Marine Science**, "**Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon**. The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-*a* concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events,

future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The Chesapeake Bay has a foundation that is trying to save it due to runoff pollution that developments create, and the Chesapeake Bay is a lot bigger than Keaouhou Bay. If it's being drastically hurt by runoff water, Keaouhou Bay waters won't stand a chance if development above the bay is allowed because this bay is very small.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow... As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keaouhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and it's rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters...And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20jeopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keaouhou Bay because it is so much smaller than the Chesapeake Bay.

If you allow Keaouhou Bay to be developed there will be a higher population in the bay and that will hurt the coral in the bay as well, because it's known that "Denser coastal populations...will lead to reef degradation by coastal constructions. Denser populations inland will lead to more runoff and situations..."

Reason #3 a Resort Development WILL Increased Human Traffic In Keaouhou Bay Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regards to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information

PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20isolation.>

This article is by abc NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday

in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found,&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20study%20said.>

If you allow this resort to be developed, you will be destroying the coral reefs in the bay because this bay is extremely small and used by a lot of locals already for fishing, canoeing, swimming, snorkeling, paddle boarding, surfing, boating...it can't afford more use by many thousands more people yearly.

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaJhJwAnWAg453tRgN0jAJWel9jnR3Z0Tv0PYGzA5ic\\_H0O1zcHNIP3ASnhcgKRv6\\_vkLpW49dbmBYoXSg3YIMgQjGBZsapdCUH1701SLbu9X5Pr3xED4kx14T0sJlvqQ1a7ZRRt3rUbraxp0dJd2AoNlSmWuxB7JEDdpJ8OGJbX7JTJWdCFXvFKJIZYeNdcJj3Sw\\_dnaUg5ZlhcjPBDImmaH15qI5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaJhJwAnWAg453tRgN0jAJWel9jnR3Z0Tv0PYGzA5ic_H0O1zcHNIP3ASnhcgKRv6_vkLpW49dbmBYoXSg3YIMgQjGBZsapdCUH1701SLbu9X5Pr3xED4kx14T0sJlvqQ1a7ZRRt3rUbraxp0dJd2AoNlSmWuxB7JEDdpJ8OGJbX7JTJWdCFXvFKJIZYeNdcJj3Sw_dnaUg5ZlhcjPBDImmaH15qI5Q%3D&tracking_referrer=abcnews.go.com)

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%2Dbased%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide.>

All developments can't fully stop polluting because of runoff from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

Reason #4 a Resort Development WILL Increase Traffic The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side.

Allowing another resort to be developed will bring more cars that will lead to a lot more traffic that the island can not handle, please read the articles below by different NEWS companies that prove this point.

This NEWS article by Hawaii News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Please watch their video on their link below because it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists comes more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state; This time last year Hawaii island was at five traffic deaths, as of April 1, 2024, they're at 14. Seven of which happened in the last two weeks... Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is the same for Big Island. The traffic problems they talk about are the same issues here on Big Island, and this article also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

Please, watch the NEWS video from the link below on aerial footage in Hilo because the footage shown is the same thing that is happening on Alii Drive and Queen K HWY, and for the same reasons.

There are 2 developments already on Alii Dr. being built as of today, and more are scheduled for this road in the near future, and Alii Dr. and Queen K HWY are the roads Kamehameha Schools Bungalow Resort will be using if approved and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow already. The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well.

See the photo below that proves this point in Kona, and here is the NEWS article by KITV NEWS that talks about Hilo and the same thing is happening in Kona on the roads Kamehameha Schools wants to develop their resort, "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html).

There was a crash on Alii Dr. and when there is an accident on this road, it turns into only one lane that needs a flagger to help direction traffic. and that adds even more traffic to this already seriously congestion road, and Kamehameha Schools wants to add a resort on this road, and that will increase the traffic even more. Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FQ5snPDjI8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Please read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path as well as The Law of the Splintered Paddle below <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

### **The Law of the Splintered Paddle**

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces. After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law, "Kʻŋ?wāi Mʻmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless (especially kʻpuna and keiki) across Hawaii be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawaii. After being added back in 1978, the law is part of Hawaii's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned

- Taking kuleana (responsibility) for those we serve
  - Doing so with compassion, love, and respect
- "We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

**The Law of the Splintered Paddle** is also on Kamehameha Schools website, so they should want to help make Big Island roads become safer and not add to the traffic and possible traffic death toll problem. <https://www.kambebe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

Besides a resort development in Keauhou Bay causing runoffs that will severely pollute the bay as the above research and science articles have shown above causing marine life to die, it will also increase in the bay's population that will seriously add to damaging even more coral, plankton and all marine life as well, and the island has severe traffic issues already with increased death tolls rising, and a resort development in Keauhou Bay will totally increase even more traffic in these already severely congested traffic areas. Reason #5 The Big Island Doesn't Have the Resources and Infrastructure for Another Resort

Please see the articles below because the Big Island doesn't have the resources or infrastructure to safely add another resort development on island and these other NEWS and Research articles prove this point.

1) Hawaii Deals with Burgeoning Waste Management Problem  
As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25

years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges in Dealing With Its Waste Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VAN DYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vanduyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to

planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) "The overwhelming plastic waste Hawaii visitors leave behind  
By Natasha Bourlin Aug 24, 2023  
Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A county commission drafts ordinance aiming to ban recyclables at West Hawaii's landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM  
Hawaii's County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawaii's County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST  
A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawaii's Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY  
HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-CA%BBt-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealahehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024  
Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii's Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST  
There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii's Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs Current situation  
There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment." <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "BIG ISLAND NEWS HECO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi' Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST  
An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawaii's State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM  
The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) "LOCAL NEWS  
HECO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST  
Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii's Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST  
Water departments on O'ahu and Hawaii's Island have advised customers to conserve water ahead of possible storm-related power outages this month.  
But what does the power grid have to do with the water supply?  
It is impossible to separate Hawaii's power system from its water system, said Kawika Uyenara, deputy director of Hawaii's County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) U.S. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues  
By Li Cohen  
Updated on: April 11, 2024 / 8:23 AM EDT / CBS News  
In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period.  
But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "we're in deep trouble."  
<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) NewsHawaii's County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST  
A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawaii Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News

on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawaii, the Hawaii County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-CA%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>  
Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

20) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/lbnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_at\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/lbnuar3/hawaiian_electric_is_reporting_that_at_several_large/?rdt=52660)

21) "NewsHawaiian Electric asking Big Island customers to conserve power due to down generators"

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will damage Keauhou Bay coral and marine life and, Big Island resources and infrastructure are currently being negatively affected from the development that is on island already, and there are years of new development that have already been approved, before having safe resources and infrastructures for new developments.

With these scientifically proven articles by some of the most professional scientists in the world, they say the a serious population increase, as well as development and resort runoff that happens because of parking lots, and... with all coastal developments, it will be dangerous for Keauhou Bay to be development because it will damage the marine ecosystems in the area.

Please, save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools because all of these articles prove it would be extremely damaging to the waters at Keauhou Bay.

Thank you,

Sincerely,

Heather Tribolet

This message is the property of Kamehameha Schools and any attachments are confidential to the intended recipient at the e-mail address to which it has been addressed. If you are not the intended recipient, you may not copy, forward, disclose or use any part of this message or its attachments. If you received this transmission in error please notify the sender immediately by e-mail or contact Kamehameha Schools at webmaster@ksbe.edu and then delete this message from your system.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Mahalo and Aloha, Mary True, 96783

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**From:** Mary True <[REDACTED]>  
**Sent:** Tuesday, August 6, 2024 3:24 PM  
**To:** 221053-01 KS Keaouhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keaouhoubay@ksbe.edu  
**Subject:** Please Don't Develop Keaouhou Bay

**Categories:** Yellow Category

**Subject:** Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT!

To whom it may concern,

Please reject Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keaouhou Bay.

Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "*What is the biggest source of pollution in the ocean?*" by NOAA, National Oceanic and Atmospheric Administration, states, "*When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides.*" It also states, "*Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff.*"

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "*Putting the Earth in Play: Environmental Awareness and Sports,*" shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keaouhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endangered these species.

## Cheri Uno

I would like to make a comment on the DEIS plan you have sent out for Keaouhou Bay but based on what I am provided I can only comment generally on what this would mean to this historical area. This is because the pages showing the schematics (pages showing the maps of the plans) you propose are so blurry I cannot read any of the labels or see any of the areas designated for what and where anything will be located. I know you can produce an arial map which is readable because the one showing the current locations of items is very readable. Generally, any development of this size in this area would bring so much more traffic on the streets surrounding the area which they are not currently able to handle. I live less than 100 yards from Alii and Kaleiopapa intersection where the traffic noise is already unbearable during the daytime and some nights. From ten PM to 4:30 AM, we have some quiet time. As you know, Kaleiopapa has a steep incline at the top where people need to rev their engines to get up. The trucks are the worst going up and down that steep hill. With a "Resort" the truck traffic would be increased 20 or more times a day from making deliveries to the resort, restaurants/bars and shops. Then, there are the tourist staying there. I'm assuming with 150 units that would be 300 people (conservative estimate since people usually come with family of 4 not just 2 people as honeymoon couples). They will be coming and going all day long up and down the streets. There is not much for them to do right here. It is off to volcanos, water falls, botanical gardens, zip lines and snorkel beaches. This area cannot handle that much traffic - I prefer the smell of fresh air to that of hundreds of cars/trucks exhaust. I also frequently hear the screeching of tires from people not knowing the area and missing the turn for Kaleiopapa and at least once a month a near-miss accident. The speed limit on Alii is 35 but most people travel about 45 or more. There are two condo complexes on Alii with blind driveways on to the street because of hills and curves on Alii - Country Club Villas and Keaouhou Akahi. They have a hard time now getting out of their complexes now. With increased traffic, this would make it impossible without endangering their lives. This is going to cause noise, air and traffic pollution to Keaouhou area. Current infrastructure cannot handle a resort here. Another pressing issue for this area is water and sewage. Every late summer and fall, we have had to conserve water in the Keaouhou/Kona area. Where are they going to get the extra water for 300 people? Resort people are not going to restrict their use of water. They are on vacation and need 2-3 showers a day not being accustomed to this hot humid weather. You're calling this an ECO-Resort - does that mean they expect to conserve water their entire vacation and flush just once a day. Tell that to the Japanese and they will laugh at you. (I have had that happen to me.) Where is the sewage going to go? Septic tanks for each unit. What about an overflow? Does that go downhill into the bay? Then, all water sports will be halted in Keaouhou Bay for weeks or months? Bringing more people into an area can never be good for the Ecology. Who are you trying to fool? Current infrastructure cannot handle a resort here. I know this area is zoned for resorts. Right now, we have one resort the Outrigger on the edge of Keaouhou Bay. It has been here before I came here in 1979. Before people realized the Hawaiian historic area that this is. I came here for the beauty and quiet of this historical area. Resorts are better kept to the northern end of the island where everyone expects to be on vacation with people in the pool playing Marco Polo and partying to the max. That was what I saw when looking for a place in Maui in 1978. I came to Keaouhou Bay because it contained so much history of the Hawaiian people and was a quiet reserved place. The birthplace of King Kamehameha III cannot remain intact and a place of reverence when it is overrun by tourists. What about the slide? Keaouhou Bay has always been a quiet place to make offerings to the great king on his birthday and other times of the year. A place to reflect on the island culture and ancestors. This is not a place for

a resort overrun by 300+ tourists. Now, if you could provide me with actual readable maps. I will further give you comments.

I would like to make a comment on the DEIS plan you have sent out for Keauhou Bay but based on what I am provided I can only comment generally on what this would mean to this historical area. This is because the pages showing the schematics (pages showing the maps of the plans) you propose are so blurry I cannot read any of the labels or see any of the areas designated for what and where anything will be located. I know you can produce an aerial map which is readable because the one showing the current locations of items is very readable.

Generally, any development of this size in this area would bring so much more **traffic** on the streets surrounding the area which they are not currently able to handle. I live less than 100 yards from Alii and Kaleiopapa intersection where the **traffic noise is already unbearable** during the daytime and some nights. From ten PM to 4:30 AM, we have some quiet time. As you know, Kaleiopapa has a steep incline at the top where people need to rev their engines to get up. The trucks are the worst going up and down that **steep hill**. With a "resort" the truck traffic would be increased 20 or more times a day from making deliveries to the resort, restaurants/bars and shops. Then, there are the tourist staying there. I'm assuming with **150 units that would be 300 people** (conservative estimate since people usually come with family of 4 not just 2 people as honeymoon couples). They will be coming and going all day long up and down the streets. There is not much for them to do right here. It is off to volcanoes, water falls, botanical gardens, zip lines and snorkel beaches. **This area cannot handle that much traffic** – I prefer the smell of fresh air to that of hundreds of **cars/trucks exhaust**. I also frequently hear the screeching of tires from people not knowing the area and missing the turn for Kaleiopapa and at least once a month a near miss accident. The speed limit on Alii is 35 but most people travel about 45 or more. There are **two condo complexes** on Alii with blind driveways on to the street because of hills and curves on Alii – Country Club Villas and Keauhou Akahi. They have a hard time now getting out of their complexes now. With increased traffic, this would make it impossible **without endangering their lives**. This is going to cause **noise, air and traffic pollution** to Keauhou area. **Current infrastructure cannot handle a resort here.**

Another pressing issue for this area is **water and sewage**. Every late summer and fall, we have had to **conserve water** in the Keauhou/Kona area. Where are they going to get the extra water for 300 people? Resort people are not going to restrict their use of water. They are on vacation and need 2-3 showers a day not being accustomed to this hot humid weather. You're calling this an **ECO-Resort** – does that mean they expect to conserve water their entire vacation and flush just once a day. Tell that to the Japanese and they will laugh at you. (I have had that happen to me.) Where is the sewage going to go? Septic tanks for each unit. What about an overflow? Does that go downhill into the bay? Then, all water sports will be halted in Keauhou Bay for weeks or months? **Bringing more people into an area can never be good for the Ecology?** Who are you trying to fool? **Current infrastructure cannot handle a resort here.**

I know this area is zoned for resorts. Right now, we have one resort on the edge of Keauhou Bay. It has been here before I came here in 1979. Before people realized the Hawaiian historic area that this is. I came here for the beauty and quiet of this historical area. Resorts are better kept to the northern end of the island where everyone expects to be on vacation with people in the pool playing Marco Polo and partying to the max. That was what I saw when looking for a place in Maui in 1978. I came to Keauhou Bay because it contained so much history of the Hawaiian people and was a quiet reserved place.

The birthplace of King Kamehameha III cannot remain intact and a place of reverence when it is overrun by tourists. What about the slide? Keauhou Bay has always been a quiet place to make offerings to the great king on his birthday and other times of the year. A place to reflect on the island culture and ancestors. This is not a place for a resort overrun by 300+ tourists.

Now, if you could provide me with actual readable maps. I will further give you comments.

**From:** Robert Vatter <[REDACTED]>  
**Sent:** Wednesday, August 7, 2024 12:26 PM  
**To:** 221053-01 KS Keauhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keauhoubay@ksbe.edu;

**Subject:** Keauhou Bay Development Plan  
**Categories:** Yellow Category

I am opposed to Kamehameha School's EIS regarding development at Keauhou Bay.

Development will affect and displace many who presently enjoy and /or make a living at the Bay.

This is a fragile ecosystem that is already feeling the impacts of development in the surrounding area.

Keauhou Bay gives both local families and tourists alike the opportunity to enjoy the beach park, bay, canoe club, and local vendors for daily snorkeling, fishing and dive trips, not to mention nightly manta dive excursions in front of the Kamehameha owned Outrigger Resort & Spa to see the endangered Manta Ray which are attracted to the areas fragile ecosystem.

As a member of the Keauhou Canoe Club for decades, I have personally enjoyed all the beauty and culture that Keauhou Bay, as it exists today, has provided for the community and visitors alike.

The natural landscape and koa haole tree canopy that lies just mauka of the bay acts like a filter before any runoff from housing and golf course above it reaches the ocean-- THIS is the reason that Keauhou Bay is still beautiful, STILL provides habitat for fish, sea turtles, mantas that draw locals and visitors to enjoy the natural beauty that exists ONLY HERE and the very reason why HAR 13-57 was enacted to protect this sensitive habitat.

I implore you, PLEASE, do NOT destroy the most beautiful and ALREADY ACCESSIBLE community and cultural resource that we have along the Kona Coastline that supports the needs of our families and visitors alike.

I ask of you, RESPECTFULLY, to REJECT this proposal.

Mahalo,  
Robert Vatter  
Keauhou, HI.

**From:** Yasmin Vatter <[REDACTED]>  
**Sent:** Wednesday, August 7, 2024 11:44 AM  
**To:** 221053-01 KS Keauhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keauhoubay@ksbe.edu

**Subject:** Zendo Kern Please OPPOSE Keauhou Bay Bungalow Resort because it WILL CAUSE SERIOUS NEGATIVE IMPACT  
**Categories:** Yellow Category

That Keauhou Bay is so beloved by locals and visitors alike is that it represents a small vision of what Old Hawai'i may have been like, from days long past. It serves a purpose to the community and is a resource we CANNOT do without. Any proposal to develop it will NOT enhance Keauhou Bay, it will destroy it.

I concur with Aunty Lily Kong that now is the time to speak because once those bulldozers appear, there is no going back, no fixing what cannot be undone.

As a member of the Keauhou Canoe Club for decades, I have personally enjoyed all the beauty and culture that Keauhou Bay, as it exists today, has provided for the community and visitors alike.

The tree and natural landscape canopy that lies just mauka of the bay acts like a filter before any runoff from housing and golf course above it reaches the ocean-- THIS is the reason that Keauhou Bay is still beautiful, STILL provides habitat for fish, sea turtles, mantas that draw locals and visitors to enjoy the natural beauty that exists ONLY HERE and the very reason why HAR 13-57 was enacted to protect this sensitive habitat.

I implore you, PLEASE, do NOT destroy the most beautiful and ALREADY ACCESSIBLE community and cultural resource that we have along the Kona Coastline that supports the needs of our families and visitors alike.

I ask of you, RESPECTFULLY, to REJECT this proposal.

Mahalo,  
Yasmin Vatter  
Keauhou

**From:** Wim Verkaik <[REDACTED]>  
**Sent:** Friday, July 26, 2024 11:36 AM  
**To:** 221053-01 KS; Keaouhou Entitlements; Alex.Roy@hawaiicounty.gov;  
Planning@hawaiicounty.gov; Keaouhoubay@ksbe.edu  
Please No Building at Keaouhou Bay  
**Subject:**  
**Categories:** Yellow Category

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keaouhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.

#### ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

Endangered Species Act

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/conservation/endangered-species-conservation/endangered-species-ac>

#### FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED

The green sea turtle is federally protected and can be seen in Keaouhou Bay weekly.

The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"

Why does Hawaii have a runoff problem?

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

Allowing this development WILL POLLUTE Keaouhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!!) states this fact clearly. Keaouhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water is that is nearby.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawaii are protected by the [Endangered Species Act \(ESA\)](#) and additionally protected by [Hawaii's](#)

[Revised Statutes Chapter 195D \(HRS\)](#) and [Hawaii's Administrative Rules \(HAR\) 13-124](#). This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

#### THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keauhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keauhou Bay will likely be changed forever.

This information is from a NOAA Scientist; "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a [recent study](#), NOAA scientists used social media to monitor human activities around endangered [Hawaiian monk seals](#). They discovered that human disturbance is more common than they thought. "<https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the [Marine Mammal Protection Act \(MMPA\)](#), as well as locally by Hawaii's Revised Statutes (HRS) [Chapter 195D](#) and Hawaii's Administrative Rules (HAR) [13-124](#)." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

Keauhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keauhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keauhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff.

Does this EIS have any reports on the endangered species that frequent Keauhou Bay? This is their habitat and it needs to be "conserved".

Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project.

#### GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses [approximately 50 pesticide active ingredients](#), including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keauhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "

Most drains have a single large exit at their point of discharge (often covered by a [grating](#)) into a [canal](#), river, lake, [reservoir](#), sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping

system. "[https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single.discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single.discharge%20into%20individual%20dry%20wells)

The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where the Hawaii government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keauhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.

Under Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

#### ALGAE BLOOMS KILL CORAL AND MARINE LIFE

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Cuana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution. "<https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-cuana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?

This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

FURTHERMORE: "If there are [toxic algal blooms](#), like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

#### ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN

Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

The article below is from NOAA regarding motor vehicle engines and pollution to the sea.

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and off into waterways, harming fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a [new report](#) from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%2D%20Nearly%2085%20percent,pipeline%20spills%2C%20says%20a%20new>

The Impact Of Stormwater – Car Emissions

7

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwaterishigherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

#### NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE

Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are%20on%20nearshore%20fish%20populations.>

What is ocean noise?

8

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

#### LEARN FROM OTHERS:

##### RUN-OFF FROM DEVELOPMENT KILLS

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is a lot bigger than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "...runoff is a significant source of harmful nitrogen pollution that continues to grow...

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams...Polluted runoff is one of the most harmful sources of pollution to the Bay and its live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20a>

[re%20placed%20in%20jeopardy.](https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20a)

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

#### MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN

Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii". Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide...

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off)." <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,had%20catastrophic%20impacts%20state%20wide.>

This article is by the Coral Reef Alliance here in Hawaii. "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change,

overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff...

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/wwhere-we-work/hawaiian-islands/#~:text=Hawaii%20reefs%20face%20major%20global,into%20Hawaii%20reefs%20waterways%20every%20day>.

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban runoff, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral->

[pollution.html#:~:text=Impacts%20from%20land%20based%20sources,and%20mortality%20in%20sensitive%20species.](https://www.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0>  
[#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide.](https://www.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humantthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humantthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (ie., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humantthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humantthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton

food web in a Mediterranean coastal lagoon. The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain". This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#~:text=Zooplankton%20are%20also%20sensitive%20to%20light%2C%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural runoff, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation." [https://scope.dge.carnegiescience.edu/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12_3.6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income.

#### HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH

Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from

Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations>.

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation>.

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found,&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20study%20said>.

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20sil> tation.

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data

from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaJhJjAnWAq453tRgNoAJWle9JinR3ZoTv0PyGzA5lc\\_H0O1zCHNIP3AShncgKRv6\\_vKLPw49dbmBYoX5g3YIMGOIGBZsabdGUCHI701SLbu9X5Pr3xED4KXl4TosJlvgQ1a7ZZR3rUbraxpod1d2AqNlSmWsuXb7JjEDdpJ8OGJpX7JTJWdCfXvFKJIZYeNdcJ3Ssw\\_dnaUg5IzhcIPBDImmaH15vgT5O%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaJhJjAnWAq453tRgNoAJWle9JinR3ZoTv0PyGzA5lc_H0O1zCHNIP3AShncgKRv6_vKLPw49dbmBYoX5g3YIMGOIGBZsabdGUCHI701SLbu9X5Pr3xED4KXl4TosJlvgQ1a7ZZR3rUbraxpod1d2AqNlSmWsuXb7JjEDdpJ8OGJpX7JTJWdCfXvFKJIZYeNdcJ3Ssw_dnaUg5IzhcIPBDImmaH15vgT5O%3D&tracking_referrer=abcnews.go.com)

INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste each year." <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keauhou Bay. On Hawaii Island, we are already struggling to meet the increasing need for resources and infrastructure.

Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawaii landfill

September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill

By [Megan Moseley](#), September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/hew-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

Time's Up For Landfills

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

17

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

Drought Conditions On Hawai'i Island Prompt Water Supply Message

by Big Island Video News  
on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information [from the U.S. Drought Monitor](#). There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawai%CA%BBi-island-prompt-water-supply-message/>

[U.S.](#)

Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By [LJ Cohen](#)

18

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to [significant droughts](#), and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the [world's largest surfing wave pool](#) opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. " ... We are on the verge of a greater catastrophe."

"We are in a [water crisis](#), that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawaii, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

UPDATE: HELCO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity us is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power->

Big power supply problems continue to plague Hawaii Island

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

- Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity
- When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use
- Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

#### FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES

A Resort Development Will Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawaii News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic

problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state. This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: All of these roads only have two lanes!

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says,

he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html).

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FQ5snPDjI8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path <https://bathhawaii.org/hawaii-countys-vision-zero-initiative/>

MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC and WASTEWATER:

1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawaii Sanitary Landfill reaching capacity.

The West Hawaii Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawaii Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

5) "The overwhelming plastic waste Hawaii visitors leave behind By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawai'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawai'i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BB%under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealahehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawai'i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawai'i Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs, Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawai'i Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawai'i State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) HELCO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawai'i's water supply Hawai'i Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawai'i Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawai'i's power system from its water system, said Kawika Uyehara, deputy director of Hawai'i County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) News Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawai'i Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai%CA%BBi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_th\\_at\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_th_at_several_large/?rdt=52660)

27

20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

#### HISTORICAL AND CULTURAL SIGNIFICANCE:

The Law of the Splintered Paddle

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, the law is part of Hawai'i's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

-Caring for and serving one's people

-Knowing and doing what is pono (right)

-Standing for the principle that leadership privilege is earned

28

-Taking kuleana (responsibility) for those we serve

-Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

The Law of the Splintered Paddle is also on Kamehameha Schools website. The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>

Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.

#### IN CONCLUSION

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keauhou Bay and "The Endangered Species Act of 1973 (ESA or "The Act"; 16 U.S.C. § 1531 et seq.) is the primary law in the United States for protecting and conserving imperiled species. Designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President Richard Nixon on December 28, 1973. The Supreme Court of the United States described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation".<sup>[1]</sup>" Endangered Species Act of 1973 - Wikipedia

This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other. This land MUST be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come.

In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved. These issues MUST be solved before considering another resort development on Big Island.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is NOT suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen.

Please save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.

Mahalo,

Wim and Nan Verkaik



The Endangered Species Act of 1973 (ESA or "The Act"; 16 U.S.C. § 1531 et seq.) is the primary law in the United....

Sincerely,  
Nancy Vidana

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**From:** Nancy Vidana <[REDACTED]>  
**Sent:** Thursday, August 1, 2024 1:41 PM  
**To:** 221053-01 KS Keaouhou Entitlements  
**Subject:** Fw: Kamehameha Schools IES Draft for Keaouhou Bay WILL HAVE NEGATIVE IMPACT

**Categories:** Yellow Category

--- Forwarded Message ---  
**From:** Nancy Vidana <[REDACTED]>  
**To:** alex.roy@hawaiicounty.gov <alex.roy@hawaiicounty.gov>; planning@hawaiicounty.gov <planning@hawaiicounty.gov>; keahoubay@ksbe.edu <keahoubay@ksbe.edu>; keahoubay@g70.design <keahoubay@g70.design>  
**Sent:** Thursday, August 1, 2024 at 01:08:21 PM HST  
**Subject:** Kamehameha Schools IES Draft for Keaouhou Bay WILL HAVE NEGATIVE IMPACT

To whom it may concern  
(Kamehameha Schools, Planning Department, Zendo Kern, State/County/Local representatives,...

I am a resident of the Big Island since 1990. I am writing to oppose the Kamehameha School's KBMP plan and Bungalow Resort "falsely called 'low impact lodging'" at Keaouhou Bay. Environmentally this will harm the bay as run off from the golf course above into the bay, after trees are cut down for the project, will impact the harbor. This will leave way for less natural ground cover to protect the flow of runoff chemicals into the harbor. Such chemicals and run off sediment cause harm and death to corals and marine life, including endangered species such as sea turtles and monk seals. Runoff from chemicals also can kill plankton that is the essential food source for Manta Rays who are both beautiful and a source of income for local tour guides.

Further, guests at the Bungalow Resort will bring their increased activities to the Bay causing distress to the marine life which is revered and respected by locals who use this Bay. Guests don't have a vested interest in the environment at the Bay as do locals who live here. Even with education programs for visitors, the Resort itself will increase distress to the ocean and land due to more usage. Increased vehicles will also add to more pollution in this area. Construction activity and noise will further disturb marine life.

Also, further tourist influx will add to the island's electrical needs which are barely serving our current population now. Contending with waste from a larger tourist influx also puts added stress on West Hawaii's waste management where we already take on the trucked waste from the East side of the island. Water conservation and mandatory lessening of water usage from residents is unfair if we allow tourist or further planned development to use water freely and largely while locals are called to conserve.

Kamehameha Schools is using this project development strictly to make profits for themselves on the back of the environment and long time residents of this island. The plan is short-sighted as it will be detrimental in the long run to our island habitat and the people that live here, and have lived here for years and generations.

**Amanda Vincent**

I do not want any development of Keauhou Bay. It will damage the ecosystem and destroy our manta rays.

**Carolina Visser**

Please reject Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a serious negative impact in Keauhou Bay.

## Sharon Vollmuth

To whom it may concern from an occasional visitor, No to the proposed development. Building always pollutes sensitive water areas. Please reject Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a serious negative impact in Keaouhou Bay. Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after. Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff." The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," shares that the golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutants and more are being held off from running into the Bay by the very trees you want to take down. Let's not forget the marine life that will be threatened by excess pollution and traffic. Keaouhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endanger these species. This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced. My friends and associates have written a good letter so I am replicating it.

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**From:** Carolina Visser <[REDACTED]>  
**Sent:** Saturday, August 3, 2024 3:46 PM  
**To:** 221053-01 KS Keaouhou Entitlements  
**Subject:** Keaouhou Bay  
**Categories:** Yellow Category

Please reject Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keaouhou Bay.

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**From:** Sharon <[REDACTED]>  
**Sent:** Sunday, August 4, 2024 4:42 PM  
**To:** 221053-01 KS Keaouhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keaouhoubay@ksbe.edu  
**Subject:** please reject the proposed Bungalow Resort

**Categories:** Yellow Category

To whom it may concern from an occasional visitor,

No to the proposed development. Building always pollutes sensitive water areas.

Please reject Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keaouhou Bay.

Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "*What is the biggest source of pollution in the ocean?*" by NOAA, *National Oceanic and Atmospheric Administration*, states, "*When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides.*" It also states, "*Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff.*"

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "*Putting the Earth in Play: Environmental Awareness and Sports*," shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keaouhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endanger these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

My friends and associates have written a good letter so I am replicating it.

Sincerely,

Sharon Vollmuth

Sharon Vollmuth

**From:** Sharon <[REDACTED]>  
**Sent:** Sunday, August 4, 2024 4:42 PM  
**To:** 221053-01 KS Keaouhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; KeaouhouBay@ksbe.edu  
**Subject:** please reject the proposed Bungalow Resort

**Categories:** Green Category

To whom it may concern from an occasional visitor,

No to the proposed development. Building always pollutes sensitive water areas.

Please reject Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keaouhou Bay.

Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "*What is the biggest source of pollution in the ocean?*" by NOAA, National Oceanic and Atmospheric Administration, states, "*When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides.*" It also states, "*Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called nonpoint source pollution, which occurs as a result of runoff.*"

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "*Putting the Earth in Play: Environmental Awareness and Sports.*" shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keaouhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endanger these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

My friends and associates have written a good letter so I am replicating it.

Sincerely,

## Pamela Wang

Keaouhou Bay holds a special old time feeling with its canoe club under the trees, a sweet stretch of beach and the small bay. The pier and the various boats complete the picture. If development goes ahead, All of this will be lost as these activities will be relocated and with them will go the history of the area.

If the proposed development were a small scale cultural and historic museum, I could imagine it, however, the plan for high end tourist development with the new roads and additional traffic really makes me question WHY HERE? You already tore down the old hotels just to the north near Kaha'u'u to return them to how they were before, so WHY is there this urgency to build in Keaouhou, when you have so many other properties available? Please consider a location where you would not be causing poisonous run off and pollution of a small pristine bay. All I can see is dollar signs and the destruction of critical habitat for protected Monk Seals and Honu, as well as the Manta Rays that live right at the edge of the bay. Consider how difficult traffic will be, and add to that the next tsunami and how already difficult it is to evacuate the coastal area. Also consider that most tourists want to be near Waikoioa where the infrastructure supports their needs. Keaouhou shopping center is really just a 'small kine' local center, not at all geared to the high end outcome you seek, especially with the outrageous rents charged there. Also consider the so called "disastrous" tourist season of 2024. We always feel that people in far away offices are making these plans with little interest in the reality of the people living in the area, but in this case, you trespass and infringe on the wildlife that your potential customers come to expect. If I had a vote, I'd say not this, not here.

## Howard Warshaw

To Whom It May Concern,

My wife and I have spent time in the Keaouhou Bay area for 23 of the past 25 years. Initially we'd come for 2-3 weeks in the summer, but as we grew to love our time here, the amount of time we spent here expanded. For the past three years we've come for 2.5 months.

On our current trip, we were disappointed to hear about the proposal by Kamehameha Schools to further develop Keaouhou Bay. We have always found the Keaouhou Bay area to be an important part of the charm of the west side of the Big Island. A project of this magnitude seems certain to strain resources and add to the ever-growing congestion problems. I fear that this project, if approved, will mean we will be looking at years of disruptive construction in an area that is already providing a meaningful experience to locals and visitors alike. If the project would clearly result in an improvement, then perhaps the years of disruption would be worth it. But a more likely outcome is more stores, more congestion, more strain on water resources, and less access to the beautiful Bay.

I hope the plan is NOT approved.

Sincerely yours,  
Howard Warshaw

**From:** [REDACTED]  
**Sent:** Friday, August 2, 2024 9:20 AM  
**To:** Alex.Roy@hawaiicounty.gov; 221053-01 KS Keaouhou Entitlements;  
Keaouhoubay@ksbe.edu; Planning@hawaiicounty.gov  
**Subject:** Serious Negative Impact on Keaouhou Bay!

**Categories:** Yellow Category

To Whom It May Concern, Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort. Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keaouhou Bay as stated in all the different researched articles below. Please, DO NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is scientifically proven that developments pollute nearby waters both during and after development. Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have ALWAYS polluted the water in EVERY coastal development area. Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development WILL BE CHANGING an Entire Ecosystem. ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay. The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list. Endangered Species Act "Section 2. Findings, Purposes, and Policy (4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to— (b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section." This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-act> (act) FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED The green sea turtle is federally protected and can be seen in Keaouhou Bay weekly. The following article that states: "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES" Why does Hawaii have a runoff problem? Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste... If polluted runoff reaches the ocean, it can wreak havoc on marine life,

including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/> (https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/) Allowing this development WILL POLLUTE Keaouhou Bay. The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!) states this fact clearly. Keaouhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen because developments have been shown to ALWAYS pollute the water in that is nearby. The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) (<https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-act>) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) ([https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121\\_02000D/HRS0195D/HRS\\_0195D-.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121_02000D/HRS0195D/HRS_0195D-.htm)) and Hawai'i Administrative Rules (HAR) 13-124 (<https://dlnr.hawaii.gov/dofaw/files/2013/09/Chap12.4a.pdf>)." This information was taken from this site <https://dlnr.hawaii.gov/dofaw/files/2013/09/Chap12.4a.pdf>. (<https://dlnr.hawaii.gov/dar/species/sea-turtles/>) THE ENDANGERED MONK SEAL WILL BE AFFECTED Keaouhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keaouhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below. Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keaouhou Bay will likely be changed forever. This information is from a NOAA Scientist; "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie!'" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In a recent study (<https://www.fisheries.noaa.gov/resource/peer-reviewed-research/social-media-data-resource-monkseal-conservation>), NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals (<https://www.fisheries.noaa.gov/species/hawaiian-monk-seal>). They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies> (<https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>) NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species. "Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA) (<https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-protection-act-policies-guidance-and-regulations>), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D ([https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121\\_02000D/HRS0195D/HRS\\_0195D-.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121_02000D/HRS0195D/HRS_0195D-.htm)) and Hawai'i Administrative Rules (HAR) 13-124 (<https://dlnr.hawaii.gov/dofaw/files/2013/09/Chap12.4a.pdf>)." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/> (<https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>) Keaouhou Bay is the monk seals and the green sea turtle's habitat. Allowing a bungalow resort to be developed in Keaouhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973. The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to protect the land around Keaouhou Bay from developments that destroy the habitat of these endangered species with pollution and runoff. Does this EIS have any reports on the endangered species that

frequent Keauhou Bay? This is their habitat and it needs to be "conserved". Under the Conservation Program there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM. "§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hiscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hiscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm) ([https://www.capitol.hawaii.gov/hiscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hiscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)) Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hiscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hiscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm) ([https://www.capitol.hawaii.gov/hiscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hiscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)) Please consider that developing a Kamehameha Schools Bungalow Resort in Keauhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keauhou Bay and the surrounding area during the building phase of this enormous project. GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS "The golf industry uses approximately 50 pesticide active ingredients (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1459948/>), including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses> (<https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>) These pesticides will be removed and replaced with pavement. This is unavoidable! Please read from Wikipedia, " Most drains have a single large exit at their point of discharge (often covered by a grating (<https://en.wikipedia.org/wiki/Grating>)) into a canal (<https://en.wikipedia.org/wiki/Canal>), river, lake, reservoir (<https://en.wikipedia.org/wiki/Reservoir>), sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:-:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:-:text=Most%20drains%20have%20a%20single,discharge%20into%20individual%20dry%20wells)) The pavement from this development will cause pollution to runoff into Keauhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keauhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references. See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEE-7.15.14.pdf> (<https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEE-7.15.14.pdf>) where the Hawai'i government states that Natural Ground Cover has 100% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keauhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years. These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat. Under

Section 2 (b) of the Endangered Species Act - Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species. It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay. ALGAE BLOOMS KILL CORAL AND MARINE LIFE The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer. When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms. Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow. One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem. Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution? This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas Introduction: Bahamas coral reef deterioration This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution..." <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-bahamas/> (<https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-bahamas/>) If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM. Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef. "...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef> (<https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>) Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement? This needs to be fully assessed because you will be changing an entire ecosystem to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay. FURTHERMORE: "If there are toxic algal blooms (<https://oceanconservancy.org/protecting-florida/harmful-algal-blooms/>), like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/> (<https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>) ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay? Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with



and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keahou Bay every night to eat zooplankton, and are often seen here during the day as well. Allowing this bay development will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments. Please read the Scientific articles below. It's Been Proven Developments Severely Pollute Nearby Waters Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii". Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide... This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban run-off). " <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event>.

[hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,had%20catastrophic%20impacts%20state%20wide.](https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event) ( <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event>.)

[hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,had%20catastrophic%20impacts%20state%20wide](https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event)) This article is by the Coral Reef Alliance here in Hawaii. "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff... When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/wherewe-work/hawaiian-islands/#:~:text=Hawai%20reefs%20face%20major%20global,into%20Hawai%20CA%20BBIS%20waterways%20every%20day> (<https://coral.org/en/wherewe-work/hawaiian-islands/#:~:text=Hawai%20reefs%20face%20major%20global,into%20Hawai%20CA%20BBIS%20waterways%20every%20day>).

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb\\_b.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb_b.pdf) ([https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb\\_b.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb_b.pdf))

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019... We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress. In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii". <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068> (<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>)

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keahou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below. "SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTARAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand. That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay

alive." The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/> (<https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>) Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,... can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species." <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%20based%20sources,and%20mortality%20in%20sensitive%20species> (<https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%20based%20sources,and%20mortality%20in%20sensitive%20species>). Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0> (<https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0>)

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[0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide](https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0)). Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris. When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=It%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=It%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.) ([https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=It%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=It%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)) Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.) Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days) ([https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days)). It's Been Proven Resort Developments KILL Marine Life This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation (<https://en.wikipedia.org/wiki/Predator>). As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem... Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web,

significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full> (https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full) The ecosystem is fragile and interconnected as is stated in this article: "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creates/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation> (https://www.marinebio.org/creates/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%2C%20and%20increases%20in%20predation,). A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation." [https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf) (https://scope.dge.carnegiescience.edu/SCOPE\_12/SCOPE\_12\_3.6\_chapter12\_257-274.pdf) All the above articles show that development of Keahou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hoods from locals on the island who depend on the manta ray tour for their income. HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN? "On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathletes partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/> (https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/) And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/> (https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/) Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs. "The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution. -Coastal

development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds. -Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs." The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs> (https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs,). There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keahou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles. If you allow this resort the amount of people in this bay will fully increase and, "Hawai'i's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations>. It's Been Proven an Increase in Human Population Destroys Coral Reefs If a Bungalow Resort is allowed to be built in Keahou Bay, it will bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Deniser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation> (https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Deniser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation). This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii (https://abcnews.go.com/alerts/environment) -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability (https://www.nature.com/articles/s41893-022-01021-4)." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20stud>y%20said. (https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-

scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,write%2C%20a%20new%20stud%20said.) By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development. "Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science

Direct <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquacultur%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation> (<https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquaculture%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation>). Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." <https://www.nature.com/articles/s41893-022-01021-4>

[4.epdf?sharing\\_token=wsakgQNhalhJiAnWAg453RgN0JAiWei9inR3ZoIv0PYGZA5ic\\_H001zeHNIP3ASnhcgkRy6\\_vkLpW49dbmBYoXsg3Y1MgQIGBZsappGUHI701SI\\_bu9x5P:3xED4KxI4I0sIvQJ1a7ZRk3IubraxpodJd2AoNlSmW5uXBJfEDdplj8OGJpX71TlWAgCfXkIzVeNacIj3Ssw\\_dnaUg5IzheqPBDImmaH15yqI5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4) (<https://www.nature.com/articles/s41893-022-01021-4>)

[4.epdf?sharing\\_token=wsakgQNhalhJiAnWAg453RgN0JAiWei9inR3ZoIv0PYGZA5ic\\_H001zeHNIP3ASnhcgkRy6\\_vkLpW49dbmBYoXsg3Y1MgQIGBZsappGUHI701SI\\_bu9x5P:3xED4KxI4I0sIvQJ1a7ZRk3IubraxpodJd2AoNlSmW5uXBJfEDdplj8OGJpX71TlWAgCfXkIzVeNacIj3Ssw\\_dnaUg5IzheqPBDImmaH15yqI5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4) INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort? There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress. Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development? "Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. Worldwide, hotels produce almost 300,000 tonnes of waste ([https://www.emerald.com/insight/content/doi/10.1108/TRC-04-2022-0010/full/html#:~:year="](https://www.emerald.com/insight/content/doi/10.1108/TRC-04-2022-0010/full/html#:~:year=) <https://www.homebiogas.com/blog/hotels-waste-management/>).

and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future. Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keauhou Bay. On Hawaii Island, we are already struggling to meet the increasing need for resources and infrastructure. Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawaii Island, September 17, 2023. The West Hawaii Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years. The West Hawaii landfill

became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish. <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/> (<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>) A County commission drafts ordinance aiming to ban recyclables at West Hawaii Island landfill By Megan Moseley (<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/#author>)

September 6, 2023 Hawaii County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill. During a commission meeting on July 26, Ramzi Mansour, Hawaii County Director of Environmental Management, told commissioners the West Hawaii Sanitary Landfill only has 20 to 25 years left before it reaches capacity. With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions. Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa. "Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill." The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/> (<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>)

Time's Up For Landfills' Gentle' demolition strategies can help preserve resources PAULA BENDER April 2, 2024 As Hawaii's government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills. Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean. New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers. The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary. <https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/> (<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>)

On Hawaii Island Prompt Water Supply Message by Big Island Video News on Oct 5, 2023 at 3:59 pm (BIVN) – With moderate to severe drought conditions being reported across Hawaii Island, local water department officials issued a statement this week on the need for customers to use drinking water wisely. Most of Hawaii Island is under "Moderate Drought" conditions, according to the latest information from the U. S. Drought Monitor (<https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?HI>). There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u. "The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawaii County Department of Water Supply. "Peak dryness is expected to occur from around January



[hawaii-island-in-march/](#)) The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments. Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order (<https://www.civilbeat.org/2022/03/the-big-island-mayors-decision-to-close-waipio-valley-road-frankles-residents/>) shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-tets-talk-about-solutions/> (<https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-tets-talk-about-solutions/>) The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: All of these roads only have two lanes! There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested. These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly. In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well. Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8423-8313ef8c4c19.html) ([https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8423-8313ef8c4c19.html)) There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars. Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FQSSnPdJi8> (<https://www.youtube.com/watch?v=FQSSnPdJi8>) Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island. Read this Path article, HAWAII! COUNTY'S VISION ZERO INITIATIVE: A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island... Here are some other statistics that are even more staggering: -28% of road-side crashes were the result of someone leaving the roadway and going into barriers or trees -13% of pedestrians hit at 20 mph actually suffer fatality -73% of pedestrians hit at 40 mph suffer fatality -25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road! -56% of fatal crashes were the result of alcohol or drugs -41% of fatal crashes occurred in light trucks and vans -49% of crashes occur during the day, outside of peak traffic hours -Of all the crash fatalities, most were males between 20 to 24-years old. "That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life? This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/> (<https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>) MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC AND WASTEWATER: 1) Hawaii Deals with Burgeoning Waste Management Problem As Landfills Face Closure and Waste-to-Energy Projects Stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020 "Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to

take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem> (<https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>) 2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawaii'i Sanitary Landfill reaching capacity. The West Hawaii'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill> (<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill>) 3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawaii'i Public Radio Published January 9, 2020 at 5:00 AM HST "Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled. For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste> (<https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>) 4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support." <https://spectrlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-to-hawaii-island-s-trash-and-recyclables-3> (<https://spectrlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-to-hawaii-island-s-trash-and-recyclables-3>) 5) "The overwhelming plastic waste Hawaii visitors leave behind By Natasha Bourlin Aug 24, 2023 Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php> (<https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>) 6) "A County commission drafts ordinance aiming to ban recyclables at West Hawaii'i landfill By Megan Moseley September 6, 2023 · 1:00 AM HST \* Updated September 6, 2023 · 2:02 PM Hawaii'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill> (<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill>) 7) "Hawaii'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/> (<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>) 8) "Hawaii'i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY HAWAII! COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply>

Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble." <https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/> (https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/)

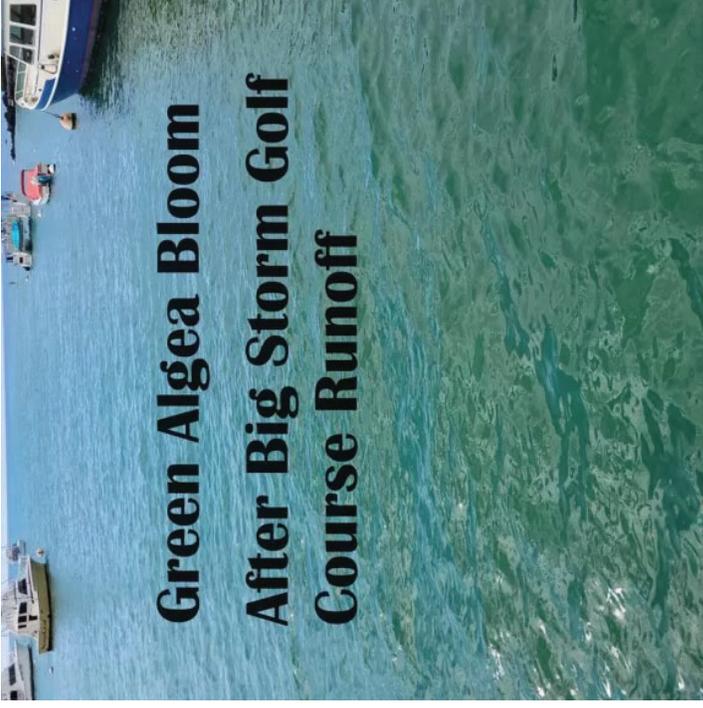
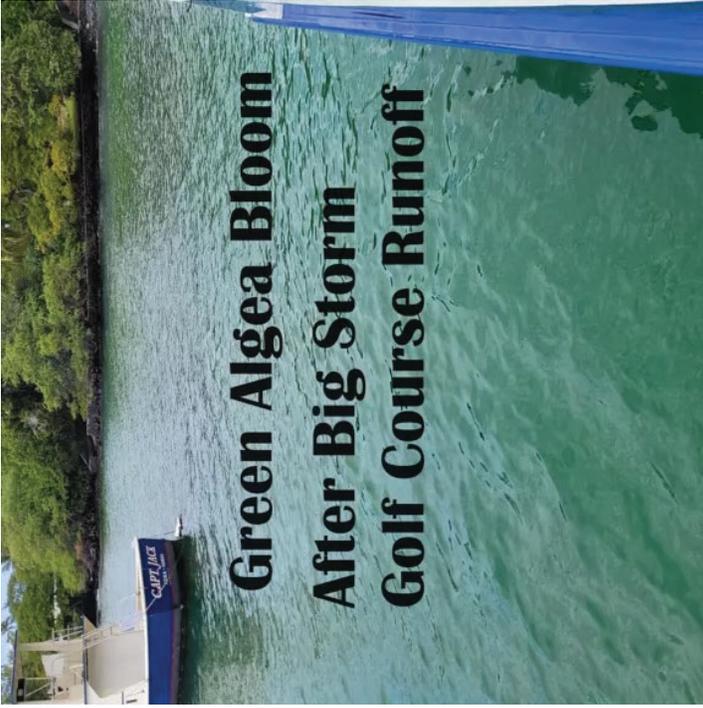
17) News Hawaii County issues mandatory 25% water restriction for North Kona August 7, 2023 - 5:21 PM HSA mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend. <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/> (https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/) 18) Hawaii Water Supply Closely Monitored As Severe Drought Continues by Big Island Video News on Nov 6, 2023 at 3:28 pm (BIVN) – With an ongoing drought on the island of Hawaii, the Hawaii County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System. <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/> (https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/) This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map> (https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map) Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island. 19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand." [https://www.reddit.com/r/Bigisland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large\\_generators/](https://www.reddit.com/r/Bigisland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large_generators/) (https://www.reddit.com/r/Bigisland/comments/1bnuar3/hawaiian\_electric\_is\_reporting\_that\_several\_large\_generators/) 20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators March 25, 2024 - 11:49 AM HST According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues. The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island." <https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/> (https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/) All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions. HISTORICAL AND CULTURAL SIGNIFICANCE: The Law of the Splintered Paddle Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces. After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed. The law provided for the safety of non-warriors during wartime and became the first written law of the

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/> (https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca%BBi-under-severe-drought/) 9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024 Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/> (https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/) 10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawaii Public Radio |By Russel Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii Department of Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters> (https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters) 11) "Kona coast faces stark wastewater tradeoffs, Current situation There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/> (https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/) We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development. 12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/hcco-initiates-30-min-rolling-outages-after-loss-of-generators/> (https://www.khon2.com/big-island-news/hcco-initiates-30-min-rolling-outages-after-loss-of-generators/) 13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 - 5:23 PM HST \* Updated February 14, 2024 - 4:21 PM The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/> (https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/) 14) HELCO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/hcco-releases-conservation-alert-for-big-island/> (https://www.khon2.com/local-news/hcco-releases-conservation-alert-for-big-island/) 15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST Water departments on O'ahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month. But what does the power grid have to do with the water supply? It is impossible to separate Hawaii's power system from its water system, said Kawika Uyebara, deputy director of Hawaii County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages> (https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages) 16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues By Li Cohen Updated on: April 11, 2024 / 8:23 AM EDT / CBS News In

Kingdom of Hawai'i. After being added back in 1978, the law is part of Hawai'i's State Constitution today. It is symbolic of servant leadership, reinforcing the importance of -Caring for and serving one's people - Knowing and doing what is pono (right) -Standing for the principle that leadership privilege is earned - Taking kuleana (responsibility) for those we serve -Doing so with compassion, love, and respect "We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina." The Law of the Splintered Paddle is also on Kamehameha Schools website. The historical value of this law should be enough to help make Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k> (<https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-ring-true-200-years-after-k>) Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues. IN CONCLUSION The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keauhou Bay and "The Endangered Species Act of 1973 (ESA or "The Act"; 16 U.S.C. § 1531 et seq. ([https://en.wikipedia.org/wiki/Et\\_seq.](https://en.wikipedia.org/wiki/Et_seq.))) is the primary law in the United States for protecting and conserving imperiled species . Designed to protect critically imperiled species from extinction (<https://en.wikipedia.org/wiki/Extinction>) as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President Richard Nixon ([https://en.wikipedia.org/wiki/Presidency\\_of\\_Richard\\_Nixon#Environmental\\_policy](https://en.wikipedia.org/wiki/Presidency_of_Richard_Nixon#Environmental_policy)) on December 28, 1973. The Supreme Court of the United States ([https://en.wikipedia.org/wiki/Supreme\\_Court\\_of\\_the\\_United\\_States](https://en.wikipedia.org/wiki/Supreme_Court_of_the_United_States)) described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation". [1]" ([https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973#cite\\_note-0](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973#cite_note-0))

1) [https://en.wikipedia.org/wiki/Endangered\\_Species\\_Act\\_of\\_1973](https://en.wikipedia.org/wiki/Endangered_Species_Act_of_1973) This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other. This land MUST be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come. In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved. These issues MUST be solved before considering another resort development on Big Island. We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay. The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is NOT suitable for this kind of development for both environmental and infrastructure reasons. The cost of what stands to be lost is far too high to allow this to happen. Please save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.





This Kind of Runoff Pollution



**WILL Happen More OFTEN  
With Development.**



Swimming Green Sea Turtle  
in  
Keauhou Bay



Mahalo,  
Jyn Watson

**From:** Joanna Weber <[REDACTED]>  
**Sent:** Saturday, August 3, 2024 11:40 AM  
**To:** 221053-01 KS Keauhou Entitlements  
**Subject:** Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT!  
**Categories:** Yellow Category

**Subject:** Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT!

To whom it may concern,

Please, reject Kamehameha Schools' EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small Bay and the added footprint of a 105 room Resort, which will include excess traffic, will have a **serious negative impact** in Keauhou Bay.

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after development.

Developments have ALWAYS polluted the water in every near-coastal development area. An article entitled, "What is the biggest source of pollution in the ocean?" by NOAA, National Oceanic and Atmospheric Administration, states, "When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides." It also states, "Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff."

The trees, you want to take down, keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "Putting the Earth in Play: Environmental Awareness and Sports," shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. This pollution and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seal's and the green sea turtle's habitat. More pollution and people will endanger these species.

This Bay is worth protecting. Please, do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,

JOANNA WEBER

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**From:** keauhoubay <keauhoubay@ksbe.edu>  
**Sent:** Monday, August 5, 2024 8:13 AM  
**To:** Joanna Weber  
**Cc:** 221053-01 KS Keauhou Entitlements; planning@hawaiicounty.gov  
**Subject:** Re: [EXTERNAL] Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT!

**Categories:** Yellow Category

Aloha e Joanna,

Thank you for your comments concerning the Keauhou Bay Management Plan, Draft Environmental Impact Statement. Your comments have been received and administratively recorded.

Comments received during the 45-day public comment period will be reproduced in the Final Environmental Impact Statement, and substantive comments addressed.

The County of Hawai'i and our planning consultant, G70, are copied here on this email so that they receive a copy of your feedback.

We appreciate your involvement and contribution to the environmental review process. Your input is invaluable in helping us develop a management plan that reflects the needs and concerns of our community.

Thank you once again for your engagement and commitment to the future of Keauhou Bay.

Mahalo,

The Keauhou Bay Project Team

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**From:** Joanna Weber  
**Sent:** Saturday, August 3, 2024 11:39 AM  
**To:** keauhoubay <keauhoubay@ksbe.edu>  
**Subject:** [EXTERNAL] Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT!

**CAUTION: This email is from an outside sender. Do not click on links or open attachments unless you recognize the sender and know the content is safe.**

**Subject:** Kamehameha Schools EIS Draft For Keauhou Bay WILL HAVE NEGATIVE IMPACT!

To whom it may concern,

received this transmission in error please notify the sender immediately by e-mail or contact Kamehameha Schools at webmaster@ksbe.edu and then delete this message from your system.

Please, reject Kamehameha Schools' EIS for Keauhou Bay to become a Bungalow Resort. This is a VERY small Bay and the added footprint of a 105 room Resort, which will include excess traffic, will have a **serious negative impact** in Keauhou Bay.

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after development.

Developments have ALWAYS polluted the water in every near-coastal development area. An article entitled, "*What is the biggest source of pollution in the ocean?*" by NOAA, National Oceanic and Atmospheric Administration, states, "*When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides.*" It also states, "*Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff.*"

The trees, you want to take down, keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "*Putting the Earth in Play: Environmental Awareness and Sports*," shares that the golf industry uses **approximately 50 pesticide active ingredients**, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. This pollution and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keauhou Bay is the monk seal's and the green sea turtle's habitat. More pollution and people will endanger these species.

This Bay is worth protecting. Please, do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,

JOANNA WEBER

This message is the property of Kamehameha Schools and any attachments are confidential to the intended recipient at the e-mail address to which it has been addressed. If you are not the intended recipient, you may not copy, forward, disclose or use any part of this message or its attachments. If you

## James Wells

Dear Planning Department, I am submitting the attached letter with my comments on the Keauhou Bay Management Plan Draft Environmental Impact Statement. Thank you for the opportunity to comment on this important matter and I hope that my comments lead to some changes in the process that result in a more comprehensive environmental analysis for the Final EIS. Sincerely

---

**From:** James Wells <[REDACTED]>  
**Sent:** Saturday, July 20, 2024 9:51 AM  
**To:** 221053-01 KS Keauhou Entitlements  
**Cc:** Jeffrey Caulfield  
**Subject:** Comments on Keauhou Bay Management Plan Draft EIS  
**Attachments:** EIS\_Comment\_Letter\_2024.pdf

**Categories:** Yellow Category

Dear Planning Department,

I am submitting the attached letter with my comments on the Keauhou Bay Management Plan Draft Environmental Impact Statement. Thank you for the opportunity to comment on this important matter and I hope that my comments lead to some changes in the process that result in a more comprehensive environmental analysis for the Final EIS.

Sincerely

Jim Wells, PhD, PG

[REDACTED]

July 19, 2024

County of Hawai'i, Planning Department  
Aupuni Center, 101 Pauahi St., Suite 3  
Hilo, HI 96720  
Attention: Alex Roy

Re: Kamehameha Schools, Keauhou Bay Management Plan Draft Environmental Impact Statement

To County of Hawaii, Planning Department,

I am submitting these comments to the Kamehameha School, Keauhou Bay Management Plan Draft Environmental Impact Statement (the "Project"). As an initial matter, I have over 30 years experience as an environmental hydrogeologist including extensive work on environmental impact assessments including impact of contaminants and sedimentation of water bodies. I have previously rented a house located on the bay and visited the bay numerous times such that my comments include personal observations. The focus of my comments is on the substantial lack of the necessary foundational studies upon which to base an assessment of the Project impact. My comments are as follows:

**A. Background Expertise**

Currently, I am President of LEA Environmental, Inc., an environmental hydrogeology and remediation company. I have over 30 years of experience in environmental science, hydrogeology and surface water, groundwater and soil contamination.

During the course of my career, I have evaluated groundwater and surface water quality at more than 200 sites around the country. My professional work experience includes conducting site investigations to define the causes, nature and extent of contamination, groundwater and surface water modeling, conducting contaminant fate and transport studies, evaluating pathways for human exposure and assessing remediation strategies. My technical expertise includes the evaluation of fate and transport of chemicals of concern in multiple phases in the environment.

I am a Professional Geologist (CA PG #7212), licensed by the California Board for Professional Engineers, Surveyors and Geologists. I earned a PhD in Geological Sciences from the University of Washington in 1990. I earned a Master's of Science Degree in Geological Sciences from the University of Washington in 1986. I earned a Bachelor's Degree in Earth Sciences from Dartmouth College in 1981.

I am a member of the Editorial Board of the journal, Environmental Forensics, a quarterly peer-reviewed scientific journal of national and international circulation. In this role, I evaluate the work of others through peer-review of manuscripts submitted for publication to the journal. I also participate in publication decisions, as well as establishing and maintaining the editorial direction of the journal. I was appointed by the State of California Department of Toxic Substances Control ("DTSC") and South Coast Air Quality Management District ("AQMD") to serve as the Technical Advisor to the Exide Community Advisory Group. In this capacity, I serve as technical liaison between community stakeholders and state regulators for the Exide Residential Cleanup Project involving evaluation and cleanup of up to 10,000 homes impacted by lead emissions from a secondary lead smelter. The Exide residential cleanup is the largest soil remediation project ever undertaken in California. I have provided expert testimony on the Exide case before a legislative hearing at the state capitol in Sacramento. I have

July 19, 2024  
Page 2 of 2

also testified twice before the U.S. House of Representatives' Committee on Natural Resources on environmental matters. My team at LEA and I currently serve as Third Party Monitors for the Exide cleanup. A copy of my resume is provided as an attachment to this letter.

**B. Substantive Comments**

As noted below, my overall conclusion is that the EIS lacks many of the basic foundational studies of existing conditions within the bay necessary to assess the potential impacts of the project and also assess potential mitigation measures. In particular, studies are needed of the existing sediments (quality and quantity) within the bay to quantify existing ecological health and credible projections are needed of potential project impacts in order to incorporate appropriate mitigation measures

The Project proposes to remove acres of forest surrounding Keauhou Bay, to construct a resort comprised of 43 homes with 150 bedrooms, build a new road connecting the north and south ends of the bay, build commercial kiosks, construct a cultural center and construct a commercial/retail center on the eastern end of the bay. As you are aware, coral, fish and other flora and fauna can be particularly susceptible to harm from excess sediment, salinity balances, toxic pollutants and nutrient loading in shallow water bodies like Keauhou Bay. In order to determine what the potential ecological impacts to the bay might be there needs to be a baseline study conducted of the existing sediments within the bay to determine the historical sedimentation rate, quantify the existing pollutant and nutrient loads within those sediments, identify the source(s) of sediments/pollutants/nutrients. In turn, this baseline analysis would contribute to the necessary analysis of potential impacts from the Project, including an analysis of mitigation measures, if any, that might be needed to protect sensitive flora and fauna within the bay, including coral communities.

Once the baseline study is conducted the EIS should provide predictions of Project impacts to the bay, including impacts from the removal of the forest, increased hardscape, and increased potential for pollutants and sediment to enter the bay from both construction activities but also new roads and housing. Once the potential impacts are analyzed, mitigation measures should then be assessed and required, if necessary that could minimize the impact on the bay. Without the foregoing analysis, I do not believe the EIS can meet its obligation of determining the magnitude of potential Project impacts on the ecology, nor identify mitigation measures that could bring the impacts down to an acceptable level, if needed.

**C. Conclusion**

The purpose of an EIS is to conduct sufficient research and studies to inform decision-makers and the public of potential Project impacts. This clearly requires an understanding of baseline conditions. In this instance, it does not appear that adequate studies have been conducted of the bay to assess existing conditions nor analyze the potential impacts from the Project so as to both assess potential mitigation measures but also inform the public and regulatory agencies of the Project impacts.

Thank you for considering these comments and concerns.  
Sincerely,

James T. Wells, PG, PhD

### Employment History

LEA Environmental/L. Everett & Associates. 2010-present  
Haley & Aldrich. 2006-2010  
Shaw Environmental. 2005-2006  
Haley & Aldrich. 2001-2005  
Ogden Environmental. 2000-2001  
Metcalfe & Eddy. 1991-2000

### Representative Project Experience

**San Roque Cleanup Fund – Groundwater Remediation, Santa Barbara, CA.** Groundwater and soil vapor monitoring, vapor intrusion mitigation, and in-situ groundwater remediation at a site with comingled plumes from four different dry cleaners. Developed conceptual site model and collected corroborating data to persuade Regional Water Quality Control Board to name additional responsible parties.

**CA Department of Toxic Substances Control (DTSC) – Exide Technical Advisor, Vernon, CA.** Appointed by DTSC and South Coast Air Quality Management District to serve as the Technical Advisor to the Exide Technologies Advisory Group. Has served since 2015 as technical liaison between community stakeholders and state regulators for this project involving evaluation and cleanup of up to 10,000 homes impacted by lead emissions from a secondary lead smelter. In addition to speaking at many community meetings, Dr. Wells provided expert testimony on the Exide case before a legislative hearing at the state capitol in Sacramento.

**Hope Ranch Air Quality Assessment, Santa Barbara, CA.** Tested indoor and outdoor air quality, sampled source area emissions at a unique phenomenon involving spontaneous combustion of organic matter in marine sediments exposed along Santa Barbara's coastal bluffs. Determined the smoldering rocks were emitting problematic levels of benzene and other VOCs which reached nearby homes, constituting a nuisance and a potential health risk.

**Magnolia Elementary School – Litigation Support, El Cajon, CA.** Combined monitoring data and modeling to reconstruct historical groundwater and indoor air impacts at an elementary school adjacent to aerospace parts manufacturer.

**SIMA Corporation – Chlorinated Solvents, Camarillo, CA.** Conducted site characterization, subsurface remediation, regulatory negotiation for PCE in soil, soil vapor and groundwater at this dry cleaner site, with special emphasis on the potential for vapor intrusion into nearby commercial buildings.

**Earthjustice – Evaluation of Neighborhood Lead Impacts, City of Industry, CA.** Worked with the nonprofit environmental law organization, Earthjustice, to identify deficiencies in soil sampling plans and statistical analyses that were

*Applies expertise in geo-chemistry and hydrogeology to solve environmental problems*

Dr. Wells is an environmental geologist with over 30 years of experience in hydrogeology and geochemistry and is a Professional Geologist, licensed by the California Board for Engineers, Land Surveyors and Geologists. Dr. Wells is President of LEA Environmental, Inc., an environmental hydrogeology and remediation company. He earned his PhD in Geological Sciences from the University of Washington in 1990; Masters of Science Degree in Geological Sciences from the University of Washington in 1986; and his Bachelor's Degree in Earth Sciences from Dartmouth College in 1981.

During the course of his career, Dr. Wells has evaluated soil, soil vapor and groundwater at dozens of sites around the country. His professional work experience includes conducting subsurface investigations to define the nature and extent of contamination in soil, soil vapor and groundwater, groundwater modeling, conducting contaminant fate and transport studies, and evaluating remediation strategies. He has extensive experience in groundwater and vadose zone computer modeling, as well as in the statistical analysis of hydrogeological systems. Dr. Wells is regularly asked to serve as an expert witness in environmental lawsuits involving subsurface contamination.

Dr. Wells is a member of the Editorial Board of the journal, Environmental Forensics, a quarterly peer-reviewed scientific journal of national and international circulation. In this role, he evaluates the work of others through peer-review of manuscripts submitted for publication to the journal. He also participates in publication decisions, as well as establishing and maintaining the editorial direction of the journal. He has given technical presentation and guest lectures at scientific conferences and universities and is author and coauthor of numerous scientific publications, including the forensic review articles in Environmental Science & Technology (U.K. Edition) Special Issue dedicated to Environmental Forensics.

In 2015, Dr. Wells was appointed by the State of California Department of Toxic Substances Control and South Coast Air Quality Management District to serve as the Technical Advisor to the Exide Community Advisory Group. In this capacity, he serves as technical liaison between community stakeholders and state regulators for this project involving evaluation and cleanup of up to 10,000 homes impacted by lead emissions from a secondary lead smelter. Dr. Wells has provided expert testimony on the Exide case before a legislative hearing at the state capitol in Sacramento. He has also twice testified before the U.S. House of Representatives Natural Resource Committee on environmental matters.

### LEA Environmental, Inc.



### Education

University of Washington, Ph.D.,  
Geological Sciences, 1990  
University of Washington, M.S.,  
Geological Sciences, 1986  
Dartmouth College, B.A., Earth  
Sciences, 1981

### Professional Registration

2001/California: Professional  
Geologist (Reg. No. 7212)

### Professional Societies

Geological Society of America  
American Ground Water  
Association  
American Chemical Society  
International Society of  
Environmental Forensics

meant to measure lead impacts due to emissions from the Quemetco Secondary Lead Smelter to soil in surrounding residential neighborhoods.

**Elem Indian Colony – Mercury and Arsenic-Bearing Mine Waste, Clearlake, CA.** Served as independent technical advisor to the Elem Indian Colony regarding remediation plans for the Sulphur Bank Mercury Mine Superfund Site. Provided assistance through EPA's TASC (Technical Assistance Services for Communities) program.

**Humphrey, Farrington & McClain – Radionuclides in West Lake Landfill Superfund Site, St. Louis, MO.** Provided expert opinions on threats to human health and the environment from radioactive waste and other contaminants that had been improperly disposed of in this landfill in the early 1970s. The material consisted of uranium-ore-processing residues that had been generated in St. Louis as part of the Manhattan Project in the 1940s.

**Reedley Remediation Trust – Chlorinated Solvents, Reedley, CA.** Provided site characterization and remediation planning advice for this contaminated groundwater plume. Also advised on the formation of a remediation trust to insure adequate resources for a long-term cleanup program.

**Isola Law Group – Rialto-Colton Superfund Site, San Bernardino County, CA.** Provided litigation support in complex, multi-party lawsuit concerning cost allocation, contaminant fate and transport and remediation technologies for large (5-mile long) perchlorate and TCE groundwater plume.

**San Carlos Apache Tribe – Technical Advice on Proposed Copper Mine, Superior, AZ.** Advised the Tribe on environmental aspects of large proposed copper mine project which the Tribe opposed. This work involved meetings and negotiations with mining company and officials of the US Forest Service regarding intergovernmental consultations and the EIS process, expert testimony in an administrative hearing, presentations at Tribal Council meetings, meetings in Washington DC with Council on Environmental Quality, EPA, USDA and Congressional staff. Testified before the U.S. House of Representatives Committee on Natural Resources.

**KB Gardena – Litigation Support & Subsurface Remediation, Gardena, CA.** Provided attorneys with technical advice and assistance with cost allocation strategy for multi-million dollar case with multiple PRPs. Conducted site remediation under existing warehouse for PCE, metals and other VOCs.

**Pacific Gas & Electric Company – Forensic Geochemistry, Chico, CA.** Analyzed high-resolution petroleum hydrocarbon data, including PIANO analysis, relative solubility and hydrocarbon weathering assessments to evaluate the theory that contamination discovered on client's property originated from off-site sources and was not due to on-site releases. PIANO analysis is a forensic technique for complex hydrocarbon mixtures using gas chromatography to speculate individual hydrocarbon compounds and group the compounds into their molecular classifications: paraffins (P), isoparaffins (I), aromatics (A), naphthalenes (N) and olefins (O).

LEA

**Rand Family Trust – Petroleum Hydrocarbons, Santa Barbara, CA.** Conducted site characterization and site remediation for a commercial site in Santa Barbara, California that was impacted with legacy contamination from a sawmill operation from the late 1800's. Achieved closure of this case from the local regulatory agency.

**U.S. EPA – Del Amo and Montrose Superfund Sites, Los Angeles County, CA.** Provided independent technical analysis and advice to community group affected by two adjacent Superfund sites. Analysis of potential exposure scenarios and efficacy of remediation plans from PCBs, metals and VOCs from Superfund sites in Los Angeles under EPA's TASC program (Technical Assistance Services for Communities).

**Terracon, Inc. – Groundwater Modeling and Litigation Support, Weld County, CO.** Complex construction defect case involving claims of \$60 million in damage allegedly due to soil expansion caused by rising groundwater from irrigation of nearby golf course and residential areas. Opposing experts spent two years and \$2 million on groundwater modeling which was eventually excluded from trial after we demonstrated unreliability and lack of relevance to judge.

**Wagstaff & Cartmell – Chromium in Tannery Waste, St. Joe, MO.** Provided litigation support for case in which tannery waste had been spread as a soil amendment over approximately 56,000 acres of agricultural land. It had been known that the sludge contained elevated levels of metals, including chromium. It was apparently not known that some of the chromium was in the form of toxic Cr(VI) which posed a serious risk to human health and the environment.

**EPA/State of Idaho – Soil Remediation Pilot Study for Metal Stabilization, Coeur d'Alene, ID.** Conducted field pilot study on metal stabilization along the Coeur d'Alene River. The river feeds Lake Coeur d'Alene which is highly-impacted by the cumulative effects of 100 years of mining in the watershed and is the primary source of drinking water for over 50,000 residents of northern Idaho. Work was sponsored by the U.S. Environmental Protection Agency (EPA) and State of Idaho in an effort to find a cost-effective means of addressing widespread soil contamination along a 30 mile stretch of the Coeur d'Alene River.

**Koch Oil – Forensic Geochemistry, Oklahoma.** Conducted forensic geochemical evaluation on naturally-occurring compounds in groundwater to assess whether historical groundwater concentration trends constituted natural background variability or potential releases from client's brine impoundments.

**Tri-County Public Airport – Forensic Geochemistry Herington, KS.** Conducted oxygen, deuterium, chlorofluorocarbon (CFC), carbon isotope analysis of groundwater and chlorinated contaminants in order to evaluate contaminant fate and transport at a former military facility.

**Gonzalez & Robinson – Groundwater Modeling, Santa Rosa, CA.** Used groundwater computer modeling to simulate groundwater flow in a residential region of Sonoma County, California.

LEA

*His area of expertise includes environmental forensics and fate and transport of organic and inorganic contaminants in soil and groundwater*

**Weitz, Luxenberg – Environmental Forensics for Chlorinated Solvents, Grand Island, NE.** Conducted forensic analysis of chlorinated solvent contamination extending in groundwater over two miles under a community. The site involved multiple releases from multiple locations and complex hydrogeology and attenuation histories.

**Kimberly-Clark – Forensic Geochemistry, Ohio.** Conducted forensic geochemical analysis to demonstrate that significant component of groundwater contamination under client's site had migrated from an off-site source. Utilized compound-specific carbon isotope analysis of chlorinated compounds and daughter product abundance. This analysis was complicated by the fact that there were low levels of residual contamination from an old on-site release, which needed to be definitively differentiated from the larger off-site flux of contaminants.

**Western States Petroleum Association – Risk-Based Clean-up Studies.** Conducted a study to develop risk-based clean-up standards for crude-oil-impacted soils, including studies of the comparative environmental risks posed by crude oil, gasoline, and diesel oil in the subsurface. Applied leaking underground fuel tank evaluation methods to crude oil sites and developed cost-effective site assessment strategies.

**Tesoro Petroleum Company – MTBE Groundwater Plume, San Fernando Valley, CA.** Managed a project in Southern California to delineate and clean-up a large release of methyl tert-butyl ether (MTBE) to soil and groundwater. A particular challenge of this project was to account for the presence of multiple high-volume water supply wells near the project site, a situation involving extensive regulatory negotiation with California Regional Water Quality Control Board and Upper Los Angeles River Area Watermaster.

**Gallagher & Kennedy – Perchlorate and Chlorinated Solvents, Santa Clarita, CA.** Provided litigation support for a lawsuit involving a 996-acre brownfield site. The site, used since the 1930s for munitions manufacturing, had soil and groundwater contamination from historic releases of metals, perchlorate and chlorinated solvents. When the local municipality took 13 acres of the property by eminent domain to build a new regional highway, the property owner sued to recoup the cost of the land. The municipality estimated a cleanup cost of \$220 million and, based on this, valued the land at only \$142,000. With colleagues, developed a soil and groundwater remediation plan and cost estimate. Through extensive soil and groundwater data analysis and 3D modeling, we developed an alternative remediation plan that dovetailed with extensive pre-development grading and employed state-of-the-art remediation technologies for perchlorate at a cost \$27 million. A jury accepted the accuracy of our remediation estimate and awarded the owner over \$12 million for land value and severance damages.

**ContiGroup Companies – Groundwater Remediation, Stockton, CA.** Completed subsurface characterization and designed a remediation strategy for this grain elevator site with carbon tetrachloride and other volatile organic

compounds in groundwater. Due to the complex stratigraphy and heterogeneous distribution of contaminant throughout the aquifer, an in-situ chemical treatment strategy was designed for this site coupled with an initial, short-term phase of groundwater extraction to achieve containment of the contaminant plume.

**The Boeing Company – Service Delivery Leader, California.** Served as Service Delivery Leader, responsible for coordinating quality and consistency for a project team located in six offices and providing environmental services simultaneously on up to ten large projects. Also conducted vadose zone computer modeling to evaluate clean-up standards for soil that would be protective of future groundwater quality.

**Northrop-Grumman Corporation – Remediation Planning, Hawthorne, CA.** Provided analysis of environmental data and regulatory requirements for large site with multiple occurrences of contamination in soil and groundwater. Advised client on cost-effective strategies and technologies for resolving environmental impairment.

**Tesoro Petroleum Company – Groundwater Contamination at Refinery, Kenai, AK.** Conducted a feasibility study for containment and remediation of a large plume of free phase petroleum at a refinery in Kenai, Alaska. Migration of the light non-aqueous phase liquid was influenced by complex fluvio-glacial stratigraphy and by fluctuating groundwater levels.

**Exxon Company, U.S.A. – Remediation Planning, Los Angeles, CA.** Developed remediation and regulatory strategies for the closure of a large urban oil field in California consisting of over 500 production sites over four square miles of residential and commercial districts. The proposed strategy was a risk-based approach addressing such factors as cost, schedule, future liability and land use.

**The Boeing Company – Aircraft Manufacturing Site Redevelopment Environmental Program, Long Beach, CA.** Team member for comprehensive subsurface investigation program for 343-acre former manufacturing facility. This complex project involved over 1500 soil borings, web-based data repository, risk-based formulation of clean-up standards, production of data reports specifically designed for use by potential buyers and other stakeholders and close coordination with redevelopment staff.

**Nestlé, U.S.A. – Aquifer Remediation, Palm Desert, CA.** Working with Nestlé technical staff, developed a technical strategy and gained regulatory acceptance of a passive bioremediation approach at an underground storage tank site which contained hydrocarbon contamination in groundwater in a beneficial-use aquifer.

**County of San Luis Obispo Water Supply – Nitrate in Groundwater, Los Osos, CA.** Conducted a study of nitrate contamination in shallow groundwater at Los Osos, California, a community that relies solely on groundwater for its municipal water supply. The study incorporated site-specific data on the transport and transformation of nitrogen in the subsurface to develop a nitrogen mass balance for all significant nitrate sources. This work resulted in quantitative

estimates of the contribution of septic system effluent to nitrate levels in groundwater.

**U.S. Navy – Groundwater Investigations and Remediation Planning, San Diego County, CA.** Managed site investigations, feasibility studies and remediation planning at eight contaminated sites overlying the sole-source aquifer at Camp Pendleton Marine Corps Base.

**Santa Barbara Historical Society – Manufactured Gas Plant Contamination, Santa Barbara, CA.** Provided environmental consulting services, advocacy and participated in negotiations with Southern California Edison (the responsible party) on behalf of Santa Barbara nonprofit organization. This work focused on soil and groundwater investigations, remediation plans and associated risks related to soil and groundwater contamination at a former manufactured gas plant on the nonprofit's property.

**Squoia Voting Systems – Groundwater Investigations, Exeter, CA.** Managed a project involving chlorinated compounds in groundwater and developed strategy to suspend active remediation on the grounds of natural contaminant of the chlorinated plume. Our approach was approved by the state.

**Los Angeles Metropolitan Transportation Authority – Comprehensive Environmental Services.** Project manager for comprehensive hazardous waste assessment contract with the LACMTA. For this project, we provided environmental services in support of land acquisition and construction for a light-rail commuter line in the Los Angeles area.

**State of California – Soil and Groundwater Remediation, Camarillo, CA.** Implemented an air sparging/soil vapor extraction soil and groundwater remediation system for extensive vadose zone and dissolved groundwater petroleum plumes at the future site of a Cal State University campus.

**Various Clients – Geostatistical Programs.** Developed programs for the statistical analysis of groundwater monitoring data for a mining facility, petroleum refinery, wastewater reclamation operation and a municipal waste landfill, all in Central California. Projects involved the implementation of EPA-approved statistical techniques to evaluate the differences between background and downgradient concentrations of groundwater contaminants.

**Depositions and Trial Testimony in Last Four Years**

2023, Funderburk, et al., vs Johnson Controls, Inc., et al., Deposition Testimony.

2023, Taylor, et al., v. Schaeffler Group USA, Deposition Testimony.

2023, HEG Trust v. Altawood, Inc., et al., Deposition Testimony.

2023, 2022, Wright v. Unocal, et al., Deposition Testimony (2022, 2023), Trial Testimony (2023).

2022, Lomas, et al., v. Delta Airlines, Deposition Testimony.

2022, 2021, Millman, et al., vs United Technologies Corporation, Deposition Testimony (November 2021, February 2022).

2021, 2020, Torres v. Igdaloff, Deposition Testimony (Sept 2020, June 2021).

2020, Houlihan v. UTC, et al., Deposition Testimony.

2020, Goldberg vs. Goss-Jewett, et al., Deposition Testimony (June and August).

2020, Acosta v. Shell Western E&P, et al., Trial Testimony.

2019, Strong v. Republic Services, et al., Deposition Testimony.

2019, McClurg, et al. v. Mallinckrodt, Inc., et al., Deposition Testimony.

2019, Brooks v. PB Products North America, et al., Deposition Testimony.

2018, Renzel v. Ventura, Deposition Testimony.

2018, Weiland Automotive Industries, Inc. et al., Deposition Testimony.

**Publications and Papers**

Expert Witness Services for Environmental Scientists and Engineers: Professional Opportunities at The Intersection of Law and Science, in: *Applied Geology of California*, Anderson and Ferriz, eds., Chapter 29 (with Schaal, Matos and Everett).

"Emerging Trends in Environmental Forensics," presentation and paper for American Law Institute Conference on Environmental Litigation, Washington, DC, 2013.

"Tracking Chlorinated Solvents in Nature – Classic and Emerging Forensic Techniques", with I. G. Petrisor, in *Environmental Forensics*, Volume 26 in the Issues in Environmental Science and Technology series, 2008.

"Perchlorate: Is Nature the Main Manufacturer?"; with I. G. Petrisor, in *Environmental Forensics*, Volume 26 in the Issues in Environmental Science and Technology series, 2008.

"Environmental Forensics," presentation to the AIHA Joint Symposium, Long Beach, California, 2004.

"A Lattice Gas Model for Heterogeneous Chemical Reactions at Mineral Surfaces and in Pore Networks," with D.R. Janecky, and B. Travis, *Physica D*, vol. 47, pp. 115-123, 1991.

"Coupled Fluid Flow and Chemical Reactions in Mid-Ocean Ridge Hydrothermal Systems: The Behavior of Silica," with M.S. Ghiorso, *Geochimica et Cosmochimica Acta*, vol. 55, pp. 2467-2482, 1991.

"The Influence of Fluid Flow and Reaction Kinetics on Mass Transfer in Mid-Ocean Ridge Hydrothermal Systems." Dissertation, University of Washington, 1990.

"3-D Numerical Models for Examining Processes in Geothermal-Hydrochemical Systems," with D.R. Janecky, B.J. Travis, G. Zvyloski, N. Rosenberg. Chapman Conference on Crustal-Scale Fluid Transport, Snowbird, Utah, 1990.  
"Cellular Automata Simulations of Mineral Surface Reactions," with D.R. Janecky, and B. Travis, Geological Society of America Annual Meeting, St. Louis, 1989.

"Determining Fluid Velocity of Black Smoker Jets from Digital Correlation of Video Images," with M.O. Smith, V.A. Atinipp, and R.E. McDuff, American Geophysical Union Fall Meeting, San Francisco, 1989.

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**From:** Nathalie Westerberg <[REDACTED]>  
**Sent:** Saturday, July 27, 2024 2:29 PM  
**To:** 221053-01 KS Keaouhou Entitlements; Alex.Roy@hawaicounty.gov; Planning@hawaicounty.gov; Keaouhoubay@ksbe.edu  
**Subject:** Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT!  
**Categories:** Yellow Category

To whom it may concern,

Please reject Kamehameha Schools EIS for Keaouhou Bay to become a Bungalow Resort. This is a VERY small bay and the added footprint of a 105 room Resort, that will include excess traffic, will have a **serious negative impact** in Keaouhou Bay.

Please, Do NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. Research has shown that developments pollute nearby waters constantly during development and after.

Developments have ALWAYS polluted the water in every near coastal development area. An article entitled, "*What is the biggest source of pollution in the ocean?*" by NOAA, *National Oceanic and Atmospheric Administration*, states, "*When large tracts of land are plowed, the exposed soil can erode during rainstorms. Much of this runoff flows to the sea, carrying with it agricultural fertilizers and pesticides.*" It also states, "*Eighty percent of pollution to the marine environment comes from the land. One of the biggest sources is called, nonpoint source pollution, which occurs as a result of runoff.*"

The trees you want to take down keep the runoff pollution from the golf course from going into the Bay. According to the National Library of Medicine, in their article, "*Putting the Earth in Play: Environmental Awareness and Sports*," shares that the golf industry uses [approximately 50 pesticide active ingredients](#), including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. These pollutions and more are **being held off** from running into the Bay by the very trees you want to take down.

Let's not forget the marine life that will be threatened by excess pollution and traffic. Keaouhou Bay is the monk seals and the green sea turtle's habitat. More pollution and people will endangered these species.

This Bay is worth protecting. Please do not put a resort in such a small area. Future generations will be deprived of what it currently is, and it could never be replaced.

Kind Regards,

Nathalie Westerberg

Rich and I have been residents of the Keaou Kai Condominiums for 10 years and have own our condo since 2014. We have always felt an emotional and spiritual connection to the land surrounding Keaou Bay and respect the cultural significance of the area. I am a member of the Keaou Canoe Club and have learned and enjoyed the paddling culture. This is a very special place to both of us.

**Comments:**

1. In general, we support the KBMP as it relates to the "long-term operations and maintenance of Keaou Bay", the opportunity to support and revitalize cultural events and traditional practices and to "preserve and support a range of passive and active recreational activities (DEIS 2.7 at 2-11).
2. We are concerned about the impact that the development proposed mauka of the Old Kona Road will have with more people/traffic in the area and the infrastructure of the current utilities.
3. And a concern that cannot be addressed in the DEIS is the noise level during construction and rebuilding of the parking lot and Old Kona Road as it is directly across the street from our building and the addition of kiosks for commercial use directly across the street of our building.

**Concerns:**

We are concerned that the DEIS does not adequately address four areas of concern:

1. Storm water runoff, which the DEIS concludes is not an issue because it hasn't been reported to the County.
2. Infrastructure, specifically relating to the existing near shore water and force main sewage lines and the associated electrical and telecommunications lines.
3. The safety and ongoing traditional use of Keaou Bay by Lahui and other residents due to the unregulated increase of motorized vessels using Keaou Bay.
4. How the plan will impact the lifestyle of current residents particularly during the construction.

**Discussion: Comments aligned with the sections and pages of the DEIS**

**4.5 Groundwater, Surface Water, and Drainage:**

The DEIS description of "Storm Water Runoff, Drainage" at DEIS 4-81 does not correspond with my observations of these events. When we have heavy rainfall there is significant unregulated draining on the grounds currently used by Keaou Canoe Club and into Keaou Bay. Runoff onto the grounds is sufficient to wash gravel down from the Old Kona Road onto the KCC grounds. But more significant is the runoff that flows down Kamehameha Road and pools at the end of the cul-de-sac and then overflows into the bay. The mitigation

measures discussed at DEIS 4-86 do not account for this level of runoff, much less its effect on Keaouhou Bay. More mitigation measures should be considered.

#### 4.7 Natural Hazards

4.7.6 Climate Change and Sea Level Rise: The DEIS acknowledges that a significant amount of sea level rise is expected in the project area and plans for up to 4 feet by 2100. "The primary means of mitigation for the KBMP is avoidance." "Potential Impacts and Mitigation Measures" at page 4-109. As discussed below (DEIS 4.12 "Infrastructure and Utilities"), the water and sewer force mains along with telecommunications and electrical lines are in the Ka'ilili/linehe Recreation Corridor at the water's edge, buried behind the long-standing seawall. The KBMP acknowledges that a "select portion" of the Project Area may experience passive flooding caused by sea level rise (SLR). (DEIS 4.16.5 "Adverse Effects that Cannot be Avoided") The DEIS should acknowledge that SLR will affect the Ka'ilili/linehe Recreation Corridor and in particular the water, wastewater, power and telecommunications infrastructure that are now located in the corridor.

#### 4.10 Recreation

The DEIS concludes that: "The Project will not significantly impact the availability of recreation opportunities in the Kona District". This may be true except for the potential of increased motorized small boat and other motorized marine recreation equipment, such as ski-dos and motorized paddle or sail boards on the waters of the bay. Unlike the larger vessels moored in the bay, these Vessels Moored Elsewhere (VME) are often operated by less experienced individuals and can move at high speeds. Both of which pose hazards to those operating without motors in the bay. These include not only outrigger canoe paddlers, but swimmers, snorkelers, scuba divers, fisherman, Honu, Nai 'a and Hahaione.

I have been out on my OC1 and with paddlers from KCC and been surprised by fast moving motorized vessels, some of whom do not observe the "No Wake" zone in the bay.

I realize that the DEIS focuses on the KBMP which is primarily a plan to develop, manage and maintain KSL uplands in the vicinity of Keaouhou Bay, not the waters of the bay itself. Yet some of what is done on the uplands surrounding the bay can affect those who use the waters of the bay. The potential infrastructure issues discussed below are among those. So are the adverse effects of adding 15 more onshore parking spaces to accommodate trailers for VME's. (DEIS 3.2.5 at page 3-78, Table 3.2 at page 3-79 and Fig. 3-64 at page 3-8). Before allowing more parking for VME trailers, the DEIS must examine the potential safety issues arising out of allowing more motorized VME's unlimited access to Keaouhou Bay.

#### 4.12 Infrastructure and Utilities (Figure 4-43 at page 4-139 "Water and Wastewater Infrastructure Map")

4.12.1 Water Supply at page 4-136: The water main that will supply the Project passes through the near shore area. The DEIS acknowledges that this area will be impacted by sea level rise but does not propose any future action. A potable water main break will have minimal effect on the bay but would severely affect all the tenants and users of the bay. This main has broken in the past and our unit was without water for a significant period. This risk might be mitigated by relocating the water main to the Old Kona Road.

4.12.2 Wastewater Treatment and Disposal at page 4-142. A wastewater force main passes through the near shore area. The DEIS acknowledges that this area will be affected by sea level rise but does not propose any future action other than increasing the amount of sewage that will be flowing through this line. A SLR induced wastewater force main break in this area is not "if it happens...but when it happens". It will have a devastating impact on the Bay and will severely affect all the tenants and users of the bay. In the recent past the wastewater force main has been exposed by high surf events. This risk should be mitigated (in fact avoided) by relocating the force main to the Old Kona Road.

4.12.4 Power and Telecommunications on page 4-144. Electrical and Telecommunications lines also pass through the near shore area. The DEIS acknowledges that this area will be affected by sea level rise but does not propose moving these lines. This risk should be mitigated (in fact avoided) by relocating the electrical and telecommunications lines to the Old Kona Road.

#### 4.12.5 Beach Restoration (NEW)

The existing rock seawall between the two shoreline access points is in poor condition and the back side is continually eroded in high surf events. The EIS acknowledges 3.2 ft of sea level rise but does not directly address the problems that will cause at this seawall. If the water, wastewater, power and telecommunications lines that currently pass through the near shore area are relocated to a safer and more resilient location along Old Kona Road then this wall might be removed. The shoreline could then be restored as the beach that existed prior to the wall being built. This would potentially be more resilient and provide increased amenity for bay users. It would be a step toward recovering what Keaouhou Bay used to be for the whole community.

#### 4.16 Probable Impacts and Other Considerations Under 11-2000.1 page 4-176

4.16.1 Cumulative Impacts page 4-176. The potential for increased conflict between motorized and non-motorized use is a cumulative impact that the DEIS should more fully consider before increasing the parking areas for VME.

4.16.5 Adverse Environmental Effects that Cannot be Avoided page 4-180. This section states "Upon completion of the Project environmental accidents are not anticipated, however if an environmental accident is to occur, DOH will be notified immediately." When the wastewater force main breaks it will be too late for DOH to do anything to save the bay. The DEIS has acknowledged 3.2 ft of sea level rise. These are predictable adverse effects that can be avoided by moving wastewater force main further from the shoreline. Reconstruction of the Old Kona Road seems like an ideal and cost-effective time to undertake this important mitigation.

In conclusion Rich and I recognize Kamehameha Schools for the extraordinary thought, effort, and expense the has gone into the DEIS. Although not native to this land, we have always felt a deep spiritual connection to Keaouhou Bay.

Linda Wilkins-Pierce

Please don't do this. It's a beautiful peaceful quiet bay. Let the ancestors lay in peace

Randy Williams

what are the specifics on the launching ramps? Moved, updated, increased to three?

Barry Willis

Don't you dare interfere with the Keauhou Canoe Club! It meets all the criterion for the items you mentioned are important for this project.

---

**From:** Robin Williams <[REDACTED]>  
**Sent:** Tuesday, August 6, 2024 4:25 PM  
**To:** 221053-01 KS Keauhou Entitlements  
**Subject:** KBMP Draft EIS Comments

**Categories:** Yellow Category

In response to the Kamehameha Schools - Keauhou Bay Management Plan--Draft EIS Comment period sent 8/6/2024

Hello,

Please don't destroy the unique combination of history and community that is Keauhou Bay. Please don't turn Keauhou Bay into another tourist area. There are plenty of tourist areas. This Bay is a unique and individual space that supports local livelihoods. It is the first place some children learn to swim or fish. It is the first place others learn to canoe. By creating "Low-impact housing" on the "resort-zoned plateau" there will be an entire destruction of the pristine natural landscape and a down flow of debris into what the plan calls a "culturally sensitive area." Given that there are already viable housing and recreation areas nearby, how can a responsible project address this devastation? By demolishing the current 'ohana of the culture of the Keauhou Bay, this proposal will do a disservice to the entire area. 'Āina should be important for a project that proposes to do so much to "improve the bay." And yet the first goal will be to destroy the beautiful and mature plants and trees living there and displace all the people who currently call Keauhou Bay home away from home.

Please, from the bottom of our hearts, reconsider.

Earth and family are irreplaceable.

The Williams Family

**From:** Winingham <[REDACTED]>  
**Sent:** Friday, August 2, 2024 12:56 PM  
**To:** 221053-01 KS, Keaouhou Entitlements; Alex.Roy@hawaiicounty.gov; Planning@hawaiicounty.gov; Keaouhoubay@ksbe.edu  
**Subject:** Kamehameha Schools EIS Draft For Keaouhou Bay WILL HAVE NEGATIVE IMPACT

**Categories:** Yellow Category

To Whom It May Concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools Environment Impact Statement (EIS) for Keaouhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT on Keaouhou Bay as stated in all the different researched articles below.

Please, DO NOT risk polluting the water in Keaouhou Bay by allowing Kamehameha Schools to develop their bungalow resort project. It is **scientifically proven** that developments pollute nearby waters both **during and after development**.

Below are scientific articles written by the National Oceanic and Atmospheric Administration (NOAA), Global Coral Reef Alliance, Hawaii Government, and many other professional organizations, that have studied and shown that developments have **ALWAYS** polluted the water in **EVERY** coastal development area.

Does this EIS (Environmental Impact Statement) have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development, and the golf course runoff? Keaouhou Bay is their habitat and this development **WILL be CHANGING an Entire Ecosystem**.

#### **ENDANGERED SPECIES CONSERVATION IMPACTED BY DEVELOPMENT**

In the Endangered Species Act of 1973 Under Section 2 (b), "To provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keaouhou Bay.

The Green Sea Turtle swims in Keaouhou Bay weekly and the monk seal has also been seen swimming and resting in Keaouhou Bay. Both of these marine animals are on the endangered species list.

#### **Endangered Species Act**

"Section 2. Findings, Purposes, and Policy

(4) the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—

(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section."

This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-ac>

#### **FEDERALLY PROTECTED GREEN SEA TURTLES WILL BE AFFECTED**

The green sea turtle is federally protected and can be seen in Keaouhou Bay weekly.

The following article states: **"POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES"**

#### **Why does Hawaii have a runoff problem?**

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

**Allowing this development WILL POLLUTE Keaouhou Bay.** The above article, written in 2014 (because runoff water from developments were polluting the ocean even then!!) states this fact clearly: Keaouhou Bay is home to countless sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals, and more and that will ALL be harmed by the severe pollution runoff that WILL happen **because developments have been shown to ALWAYS pollute the water is that is nearby.**

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawaii are protected by the Endangered Species Act (ESA) and additionally protected by Hawaii Revised Statutes Chapter 195D (HRS) and Hawaii Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

## THE ENDANGERED MONK SEAL WILL BE AFFECTED

Keaouhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL. If another resort is allowed to be built, in addition to the pollution, it will also bring a lot more people down to Keaouhou Bay. This increases the chances of a resting monk seal being disturbed by humans trying to get close, take "selfie" photos, and being generally uninformed and harmful. Please see article on Selfie Culture and its harmful effects below.

**Has the EIS done any research on what an increased population would do in such a small area, and what will happen to the endangered species that live there? With a significantly increased population their habitat of Keaouhou Bay will likely be changed forever.**

This information is from a NOAA Scientist; **"Study shows selfie culture impacts how people behave when posting images of an endangered species on social media. There's a seal on the beach! Let's go get a 'selfie'!"** That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species.

In a [recent study](#), NOAA scientists used social media to monitor human activities around endangered [Hawaiian monk seals](#). They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-civ-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

"Hawaiian monk seals are protected federally by the ESA and the [Marine Mammal Protection Act \(MMPA\)](#), as well as locally by Hawai'i Revised Statutes (HRS) [Chapter 195D](#) and Hawai'i Administrative Rules (HAR) [13-124](#)." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

**Keaouhou Bay is the monk seals and the green sea turtle's habitat.** Allowing a bungalow resort to be developed in Keaouhou Bay, the habitat of these endangered species, is to threaten their life and habitat with golf course runoff pollution, as well as development pollution. **By threatening their habitat, and hence their lives, this development goes completely against the Endangered Species Act of 1973.**

The verbiage in the Endangered Species Act states, "to conserve". In this case, "to conserve" would be to **protect the land around Keaouhou Bay** from developments that destroy the habitat of these endangered species with pollution and runoff.

**Does this EIS have any reports on the endangered species that frequent Keaouhou Bay? This is their habitat and it needs to be "conserved".**

Under the **Conservation Program** there should be research done on endangered species and their associated ecosystems. A large bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.

"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems,

and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated ecosystems." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm).

Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." [https://www.capitol.hawaii.gov/hrscurrent/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please consider that developing a Kamehameha Schools Bungalow Resort in Keaouhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would be caused by removing the all the trees that currently serving as a natural pollution filter, and replacing the land with housing, cars, humans, and waste. There would also be tremendous runoff damage into Keaouhou Bay and the surrounding area during the building phase of this enormous project.

## GOLF COURSE POLLUTION KILLS MARINE LIFE AND DRASTICALLY CHANGES ECOSYSTEMS

"The golf industry uses [approximately 50 pesticide active ingredients](#), including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinegolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keaouhou Bay more severely should the natural habitat of the trees be removed and replaced with pavement. This is unavoidable!

Please read from Wikipedia, "

Most drains have a single large exit at their point of discharge (often covered by a [grating](#)) into a [canal](#), river, lake, [reservoir](#), sea or ocean. Other than catch basins, typically there are no treatment facilities in the piping system." [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single,dishcharge%20into%20individual%20driv%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single,dishcharge%20into%20individual%20driv%20wells)

The pavement from this development will cause pollution to runoff into Keaouhou Bay because this treed land that will become a housing development is situated directly between the golf course and the Bay. These trees, which absorb all the pollution from the golf course is the BEST AND ONLY PROTECTION POLLUTION FILTER Keaouhou Bay has from the golf course pesticides, fertilizer and weed killer. See the below paragraph for further references.

See page 2 at: <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEF-7.15.14.pdf> where **the Hawaii government states that Natural Ground Cover has 10% runoff, where has development has 55% runoff. So, even if you have storm drains the pavement this development will create will cause more runoff into Keaouhou Bay than the Natural Ground Cover that is has now, that has been protecting the bay from golf course pollution for years.**

**These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land MUST BE PRESERVED and CONSERVED as the natural protector for Keauhou Bay and for these endangered species habitat.**

Under Section 2 (b) of the Endangered Species Act - **Keauhou Bay MUST BECOME A CONSERVATION AREA for these endangered species.** It is currently their habitat, and to allow a large resort development to be built above this bay clearly threatens the lives of these endangered species by allowing golf course toxic pollution and development pollution to run into these species natural habitat of Keauhou Bay.

### **ALGAE BLOOMS KILL CORAL AND MARINE LIFE**

The trees that are slated to be cleared for the development further protect Keauhou Bay from algae blooms that have been proven to be caused by pollution that is runoff from fertilizer and weed killer.

When there is heavy rain the land above the bay has a greater runoff than normal. Without the trees, the runoff from the golf course pollution will pour into the Bay likely causing frequent algae blooms.

**Algae blooms have been shown to kill coral and marine life as stated in the many articles that will follow.**

One of these articles is from the Global Coral Reef Alliance. They have researched the effects on reefs before and after a golf course developments. Though this development is not a golf course development, it is located just below a golf course and exposes the bay to the pollution from the golf course by removing the proven natural filter of the trees and natural ecosystem.

**Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?**

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development.. The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution.. "<https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING and possibly DESTROYING KEAUHOU BAY'S ECOSYSTEM.

Another study by the Coral Reef Alliance titled, "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef.

"...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

**Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?**

This needs to be fully assessed because **you will be changing an entire ecosystem** to build a bungalow resort. It rains in Keauhou Bay many nights out of the year and this kind of pollution will kill the beautiful and necessary coral in the Bay.

**FURTHERMORE:** "If there are [toxic algal blooms](#), like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

### **ENGINE POLLUTION CAUSES ISSUES IN THE OCEAN**

**Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keauhou Bay?**

Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keauhou Bay, what traffic and increased population studies have they done? There will be employees with cars, guests with cars, visitors with cars. At times this would range to over 200 cars (likely more), coming in and out of, and parking above Keauhou Bay thereby causing serious car population issues because of all these added cars right next to the bay.

**The article below is from NOAA regarding motor vehicle engines and pollution to the sea.**

What is the biggest source of pollution in the ocean?

Most ocean pollution begins on land.

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or construction sites can run off into waterways, harming fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

**Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects**

News Release September 28, 2022

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a [new report](#) from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects/#:~:text=WASHINGTON%20%2D%2D%20Neatly%2085%20percent,pipeline%20spills%2C%20sa%20a%20new>

### **The Impact Of Stormwater – Car Emissions**

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershepherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

### **NOISE POLLUTION'S HARMFUL EFFECT ON MARINE LIFE**

**Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keauhou Bay during development?**

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behavior of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

### **How Does Noise Pollution Harm Marine Species?**

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the

7

welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

### **What is ocean noise?**

"Ocean noise refers to sounds made by human activities that can interfere with or obscure the ability of marine animals to hear natural sounds in the ocean.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats." <https://oceanservice.noaa.gov/facts/ocean-noise.html>

### **LEARN FROM OTHERS: RUN-OFF FROM DEVELOPMENT KILLS**

The Chesapeake Bay has a foundation that is trying to save their bay due to runoff pollution that was caused by developments. Chesapeake Bay is **a lot bigger** than Keauhou Bay. If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed. Keauhou Bay is a much smaller ecosystem.

**This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states,** "...runoff is a significant source of harmful nitrogen pollution that continues to grow...

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.

8

Stormwater runoff pollution threatens Chesapeake Bay and its rivers and streams... Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20leopardy.>

If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay due to its size and fragility.

### **MANTA RAY HABITAT, CORAL REEF BLEACHING, & MARINE LIFE ~ THE DEVASTATING EFFECTS OF DEVELOPMENT ON THE OCEAN**

**Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?**

The studies below show that developments kill coral, and marine life. Zooplankton are part of this marine life and they are also killed and negatively affected. Zooplankton are food for manta rays. Manta rays are in Keauhou Bay every night to eat zooplankton, and are often seen here during the day as well.

Allowing this bay developed will also be a death sentence for many types of marine life including planktons. There is NO WAY to stop this from happening due to the fact that polluted runoff rain water from developments can't be fully stopped. This has been shown to happen in ALL coastal developments.

Please read the Scientific articles below.

#### **It's Been Proven Developments Severely Pollute Nearby Waters**

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawaii". Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic impacts state-wide...

This was the third major bleaching episode in Hawaii over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban runoff). " <https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event>.  
<http://hawaii.gov/2019/03/20/bleaching-2019-is-occurring-more-had-20-catastrophic-20-impacts-20-state-20-wide>.

**This article is by the Coral Reef Alliance here in Hawaii.** "An ecosystem under threat Hawaii's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian->

[islands#:~:text=Hawaii%20reefs%20face%20major%20global%20into%20Hawaii%20CA%20BBIs%20waterways%20ever%20day.](https://islands.gizmodo.com/BBIs%20reefs%20face%20major%20global%20into%20Hawaii%20CA%20BBIs%20waterways%20ever%20day)

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.cofis.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.cofis.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "**Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019...**

**We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress.** In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii." <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawaii has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all aquatic life there. Manta Rays need to eat 5 times their body weight in zooplankton daily. Their population will be severely affected should the plankton die. Please see the cited information below.

**"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.**

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

**Coral reefs are known to be highly negatively impacted by developments because, "Impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species."** <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%20based%20sources,andy%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "**Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs provide.**" <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide.>

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. **Land-based runoff and**

**pollution discharges can result from dredging, coastal development... This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.**

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals,](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals,)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project.)

**Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival"** [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

#### **It's Been Proven Resort Developments KILL Marine Life**

This article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that shocking shows that in a very short time, big changes can occur due to runoff. A development will hurt and kill plankton, by Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. **This occurred in a relatively short time considering that the experiment lasted less than three weeks.** The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-a concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

**The ecosystem is fragile and interconnected as is stated in this article:** "Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20also%20sensitive%20to,light%20and%20increases%20in%20predation.>

A research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "**Toxic Effects of Pollutants on Plankton: There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage.** Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation."

[https://scope.dge.camegiescience.edu/SCOPE\\_12\\_3\\_6\\_chapter12\\_257-274.pdf](https://scope.dge.camegiescience.edu/SCOPE_12_3_6_chapter12_257-274.pdf)

All the above articles show that development of Keauhou Bay WILL hurt plankton life and marine life in the bay because pollutant runoff is inevitable and unavoidable during construction and afterwards. The manta ray food source will likely disappear. This will be devastating for the manta ray populations. Furthermore, if manta rays die or leave the area, the loss will in turn affect many lively hooders from locals on the island who depend on the manta ray tour for their income.

#### **HUMAN POPULATION INCREASES LINKED DIRECTLY TO CORAL DEATH**

**Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?**

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons partners, there likely be more than 6,300 people descending on Kona..." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: **The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life.**" <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

**Where are the EIS reports on human density? Below are reports that show human population destroys coral reefs.**

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the destruction of sensitive marine habitats such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of sediments into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development/#:~:text=Coastal%20development%20may%20cause%20the,negative%20impact%20enrire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. **Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it.** Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

#### It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will bring a serious increase in human traffic. **"Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs.** Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regard to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National Center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,to%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, **"This is how tourists are destroying coral reefs in Hawaii. The less people at a certain site, the more coral there are, the research found.** The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment – especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20a,there%20are%2C%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%2C%20a%20new%20study%20said.>

By allowing this development you are stressing an already fragile Eco-system. The small bay is currently used by many locals for boating, fishing, canoeing, paddle boarding, snorkeling, manta night dives, surfing, and swimming. We know, and research shows, that more people cause more damage. The area simply cannot afford or support this development.

**"Denser coastal populations and greater wealth will lead to reef degradation by coastal construction.** Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with meta-population theory since they translate to increases in patch-

mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs.' This information was taken from Science <https://www.sciencedirect.com/science/article/abs/pii/S0065288120300328#:~:text=Aquacultur,e%20will%20alleviate%20some%20fishing,to%20more%20runoff%20and%20siltation.>

Another article by Nature Sustainability, **"Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity.** By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing\\_token=wsakgQNhaJhJAnWAq453TRqNDjAWel9mR3ZoTv0PvGzA5lc\\_H001zeHNIP3ASnhccKRv6\\_vKLPw49dbmBYoXSq3Y1MqQIGBZsappdGUH7O1SLbu9x5P3xED4Kx4T0sJlvQ1a72ZR3tUbraxpodJq2AoNlSmWSuxB7JlEDqbj8OGJpx71TJw6CfXFKJZYeNdcJ3Sw\\_dnaU65ZlhcIPBDlmmahH15vqT5Q%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.epdf?sharing_token=wsakgQNhaJhJAnWAq453TRqNDjAWel9mR3ZoTv0PvGzA5lc_H001zeHNIP3ASnhccKRv6_vKLPw49dbmBYoXSq3Y1MqQIGBZsappdGUH7O1SLbu9x5P3xED4Kx4T0sJlvQ1a72ZR3tUbraxpodJq2AoNlSmWSuxB7JlEDqbj8OGJpx71TJw6CfXFKJZYeNdcJ3Sw_dnaU65ZlhcIPBDlmmahH15vqT5Q%3D&tracking_referrer=abcnews.go.com)

#### INFRASTRUCTURE AND RESOURCES ON AN ISLAND ALREADY HIGHLY IMPACTED AND STRUGGLING FOR ANSWERS

**Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?**

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, Hilo, Puna, Ocean View and Volcano. The entire Big Island has construction projects already in progress.

**Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?**

"Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises. **Worldwide, hotels produce almost 300,000 tonnes of waste each year.**" <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet, which means our island's resources and infrastructure will be taxed even more severely in the near future.

Please read the below articles that prove Big Island does not have the resources or infrastructure for a 143-Unit Bungalow Resort Development at Keauhou Bay. On Hawaii Island, we are already struggling to meet the increasing need for resources and infrastructure.

**Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill**

September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

### **A County commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill**

By [Megan Moseley](#), September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

### **Time's Up For Landfills**

'Gentle' demolition strategies can help preserve resources

PAULA BENDER April 2, 2024

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

### **Drought Conditions On Hawai'i Island Prompt Water Supply Message**

by Big Island Video News  
on Oct 5, 2023 at 3:59 pm

(BIVN) – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information from the [U.S. Drought Monitor](#). There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'u.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

### **From a Water Supply news release:**

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawai%CA%BBi-island-prompt-water-supply-message/>

[U.S.](#)

### **Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**

By [Li Cohen](#)

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to [significant droughts](#), and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the [world's largest surfing wave pool](#) opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. "... We are on the verge of a greater catastrophe."

**"We are in a water crisis, that has to be made very clear."** Wayne Tanaka, director of Sierra Club of Hawaii, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "We may come to a point where we have to decide ... who gets water and who doesn't."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island, parts need to be shipped. The power plant currently has generators that are not working, and because of this (and other reasons), the Big Island needs to seriously conserve power so that everyone will have power. If this problem of shipping parts can happen once, it can and will happen again.

#### **UPDATE: HELCO asks for continued energy conservation**

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HELCO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity use is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

**Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.**

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/hcco-customers-on-hawaii-island-asked-to-conserve-power->

17

#### **Big power supply problems continue to plague Hawaii Island**

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

**The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal.** Those sources of variable, renewable energy can supply up to 15% of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

#### **Hawaii Island customers urged to reduce electricity use through April**

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

What You Need To Know

-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

**-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island**

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

18

## **FURTHERMORE: TRAFFIC, LACK OF RESOURCES, AND FATALITIES**

### **A Resort Development WILL Increase Traffic on Already Severely Trafficked Roads. Are there traffic study reports for this EIS?**

A development with 150 rooms comes with over 150+ cars. Employees, guests, and visitors will all have cars, plus the regular locals who go there to paddle and enjoy the bay. All this could range in over 300 cars a day because of this resort development.

The Big Island already has a serious traffic issue due to a lack of infrastructure. This is in part due to poor planning, and in part due to geography challenges.

The articles below by different NEWS companies highlight the point that many traffic issues stem from lack of infrastructure and resources. Adding more cars to the road by building another resort in an area that is already stressed, will only increase the already mounting problems with traffic.

This NEWS article by Hawai'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Watch the video on their link below as it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists there will be more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "**Hawaii Island has most traffic fatalities in state**". This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks.

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

**"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here,"** he added. "<https://www.khon2.com/local-news/traffic-fatalities-for-hawaii-island-in-march/>

**The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.**

Please read this article because what it says about Oahu is a mirror for Big Island. The traffic problems they discuss are the same issues here on Big Island; and it also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-jams-lets-talk-about-solutions/>

The news video below shows aerial footage in Hilo. The footage shown is the same thing that is happening on Alii Drive and Queen K Highway, and for all the same reasons: **All of these roads only have two lanes!**

There are two developments already on Alii Drive being built as of today; and more are scheduled for this road in the near future. Alii Drive and Queen K Highway are the roads Kamehameha Schools Bungalow Resort will be using if approved, and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems. Traffic is extremely slow because of so many people who now live here and all the visitors that come yearly.

In addition, the concern on Kona side is tsunami evacuations rather than lava evacuations. In this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every weekday and often on weekends as well.

Here is the news article by KITV NEWS that highlights the traffic issues discussed above: "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-jams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash recently on Alii Drive (see video below). When there is an accident on Alii Drive, it turns the already small two-lane road into only one lane that requires a flagger to help direct traffic. Kamehameha Schools wants to add a resort on this tiny road that will increase the traffic by hundreds of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FQSnPDii8>

**Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.**

**Read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE:**

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawaii Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

**“That’s just Big Island traffic,”** is a common sentiment. But what if we didn’t have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?”

This was taken from Path <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

### **MORE ARTICLES HIGHLIGHTING INFRASTRUCTURE AND RESOURCE DEFICITS, INCLUDING WATER, TRASH, ELECTRIC and WASTEWATER:**

#### **1) Hawaii Deals with Burgeoning Waste Management Problem**

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

“Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.” <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

**2) “Big Island Now readers seem to agree that there’s likely no single solution for slowing down the timeline of the West Hawaii Sanitary Landfill reaching capacity.**

The West Hawaii Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years.” <https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

**3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste** Hawaii Public Radio Published January 9, 2020 at 5:00 AM HST

“Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the East side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona.” <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

**4)“What happens to Hawaii Island’s trash and recyclables? BY MICHELLE BRODER VANDYKE** HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke Hawaii Island PUBLISHED 11:30 AM ET Dec. 17 The future of the landfill

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community support.” <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables-->

**5) “The overwhelming plastic waste Hawaii visitors leave behind** By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists’ first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips.” <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

**6) “A County commission drafts ordinance aiming to ban recyclables at West Hawaii landfill** By Megan Moseley September 6, 2023 · 1:00 AM HST  
\* Updated September 6, 2023 · 2:02 PM

Hawaii County’s Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island’s only working landfill.” <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

**7) “Hawaii County issues mandatory 25% water restriction for North Kona** August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokohau Deepwell over the weekend.” <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

**8) “Hawaii Water Supply Closely Monitored As Severe Drought Continues** by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions.” <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca-bbi-under-severe-drought/>

**9) “Big Island Concerns About Water Quality** Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona.” <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

**10) “Researchers find sewage from an oceanfront Big Island community reaches nearshore waters** Hawaii Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawaii Department of Health. <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

#### 11) "Kona coast faces stark wastewater tradeoffs, Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

#### 12) "HELCO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/helco-initiates-30-min-rolling-outages-after-loss-of-generators/>

#### 13) Hawaii State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST \* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

#### 14) HELCO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/helco-releases-conservation-alert-for-big-island/>

#### 15) "Here's how power outages can have repercussions for Hawaii's water supply Hawaii Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on Oahu and Hawaii Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawaii's power system from its water system, said Kawika Uyehara, deputy director of Hawaii County's Department of Water Supply." <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

23

#### 16) US Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues

By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "We're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

#### 17) News Hawaii'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

#### 18) Hawaii'i Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawaii, the Hawaii County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-ca-bbi-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to their homes to help with power issues on the island.

#### 19) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_larger/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_larger/?rdt=52660)

#### 20) "Hawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

24

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will further deplete and stress resources and infrastructure on an island already struggling. There are years of new development that have already been approved but not completed. It is not responsible or prudent to continue to develop this resort under these current conditions.

### **HISTORICAL AND CULTURAL SIGNIFICANCE:**

#### **The Law of the Splintered Paddle**

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law "Ke Kānāwai Māmalahoe" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless, especially kupuna and keiki, be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, **the law is part of Hawai'i's State Constitution today.**

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

**"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."**

**The Law of the Splintered Paddle is also on Kamehameha Schools website.** The historical value of this law should be enough to help make

Big Island roads become safer, and not adding to the traffic and issues of our already dangerous roads. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-rmq-true-200-years-after-k>

**Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious resource and infrastructure issues.**

### **IN CONCLUSION**

The articles cited in this letter, many by some of the most esteemed scientists in the world, show with clarity that allowing this development is going to cause devastating, lasting, effects on the Eco-system in Keauhou Bay and "The Endangered Species Act of 1973 (ESA or "The Act"; 16 U.S.C. § 1531 et seq.) **is the primary law in the United States for protecting and conserving imperiled species.** Designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untempered by adequate concern and conservation", the ESA was signed into law by President Richard Nixon on December 28, 1973. The Supreme Court of the United States described it as "the most comprehensive legislation for the preservation of endangered species enacted by any nation".<sup>[1]</sup> [Endangered Species Act of 1973 - Wikipedia](#)



This location, currently acting as a natural filter, is especially vulnerable due to having a golf course on one side and a natural treasure like Keauhou Bay on the other. This land **MUST** be conserved in order to keep Keauhou Bay safe for all the marine life to be able to live there for years to come.

In addition to the natural disaster this will cause, Hawai'i Island is already having serious infrastructure and resource issues that have yet to be solved. These issues **MUST** be solved before considering another resort development on Big Island.

We need to work in harmony with the land and the people before pushing forward with new developments, especially in sacred and special places like Keauhou Bay, the birthplace of King

Kamehameha III. Keauhou Bay is a small, fragile Eco-system, that is already pressured by boating, golfing, population issues, and hotels that are all around the entire bay.

The trees that currently stand on the land that is threatened to be developed clearly protects the marine life and environment from further damage. The location is NOT suitable for this kind of development for both environmental and infrastructure reasons.

The cost of what stands to be lost is far too high to allow this to happen.

Please save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools.

Mahalo,

Curt & Ellen Winningham



## Cory Anonymous

Justify putting a road through Kamehameha III's birth site. Specify how cultural and historic preservation will be accomplished. Justify building more shops when there are empty shop spaces for lease nearby. Explain how erosion will be prevented after trees are cut down. Justify building a resort that will benefit a few while severely impacting the community by the loss of one of the last historically untouched areas on the island that has not been overdeveloped and has been beloved by locals and visitors for many decades.

---

**From:** Cory <[REDACTED]>  
**Sent:** Monday, July 1, 2024 8:31 PM  
**To:** 221053-01 KS Keauhou Entitlements  
**Subject:** comments

**Categories:** Red Category

Justify putting a road through Kamehameha III's birth site. Specify how cultural and historic preservation will be accomplished.

Justify building more shops when there are empty shop spaces for lease nearby.

Explain how erosion will be prevented after trees are cut down.

Justify building a resort that will benefit a few while severely impacting the community by the loss of one of the last historically untouched areas on the island that has not been overdeveloped and has been beloved by locals and visitors for many decades.

**From:** Donald <[REDACTED]>  
**Sent:** Saturday, July 20, 2024 3:35 PM  
**To:** 221053-01 KS Keauhou Entitlements  
**Subject:** REJECT Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort.

**Categories:** Green Category

To whom it may concern,

Please read the scientific proof in this letter and REJECT Kamehameha Schools EIS for Keauhou Bay to become a Bungalow Resort.

Please state in your report that a Bungalow Resort WILL have a SERIOUS NEGATIVE IMPACT in Keauhou Bay as stated in all the different researched articles below.

Please, Do NOT risk polluting the water in Keauhou Bay by allowing Kamehameha Shoals to develop their bungalow resort project, because it is scientifically proven that developments pollute nearby waters constantly during development and after.

Please read these Scientific articles written by NOAA, National Oceanic and Atmospheric Administration and many other professional organizations, that have studied and proved that developments has ALWAYS polluted the water in every near coastal developed area.

**First, does this EIS have any kind of reports and studies on how the endangered species and marine life will handle the extra pollution due to development and golf course runoff because Keauhou Bay is their habitat and this development WILL be CHANGING an Entire Ecosystem.**

**In the Endangered Species Act of 1973 Under Section 2 (b), "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." This would be Keauhou Bay.**

The Green Sea Turtle swims in Keauhou Bay weekly and the monk seal has also been seen swimming and resting in Keauhou Bay. Both of these marine animals are on the endangered species list.

The Green Sea Turtle is protected by more than one law. "All sea turtles in Hawai'i are protected by the Endangered Species Act (ESA) and additionally protected by Hawai'i Revised Statutes Chapter 195D (HRS) and Hawai'i Administrative Rules (HAR) 13-124." This information was taken from this site <https://dlnr.hawaii.gov/dar/species/sea-turtles/>

"Hawaiian monk seals are protected federally by the ESA and the Marine Mammal Protection Act (MMPA), as well as locally by Hawai'i Revised Statutes (HRS) Chapter 195D and Hawai'i Administrative Rules (HAR) 13-124." This was taken from <https://dlnr.hawaii.gov/dar/hawaiian-monk-seal/>

#### ENDANGERED SPECIES CONSERVATION

Endangered Species Act

#### **"Section 2. Findings, Purposes, and Policy**

**(4) The United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to—**

**(b) PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section.** " This was taken from <https://www.fisheries.noaa.gov/national/endangered-species-conservation/endangered-species-act>

Keaouhou Bay IS the monk seals and the green sea turtle's habitat and to allow a bungalow resort to be developed in Keaouhou Bay, that is these endangered species habitat, is to threaten these endangered species habit with golf course runoff pollution, as well as development pollution and hence, threaten their habitat, hence their lives, and goes completely against the Endangered Species Act of 1973.

The words in the Endangered Species Act states, "to conserve" and conserving the endangered species that enter into Keaouhou Bay would be to NOT DEVELOP A BUNGALOW RESORT because this would cause serious pollution runoff that would pollute the bay and endanger these already endangered species, the green sea turtle and the monk seal.

**Does this EIS have any reports on the endangered species that frequent Keaouhou Bay because this is their habitat.**

**Under the Conservation Program there should be research done on endangered species and their associated ecosystems, which is Keaouhou Bay. Because this bungalow resort development WILL FOREVER CHANGE THIS ECOSYSTEM.**

**"§195D-5 Conservation programs. (a) The department shall conduct research on indigenous aquatic life, wildlife, and land plants, and on endangered species and their associated ecosystems, and shall utilize the land acquisition and other authority vested in the department to carry out programs for the conservation, management, and protection of such species and their associated**

**ecosystems."** [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

**Also, under this same Conservation program, "(2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species."** [https://www.capitol.hawaii.gov/hrs/current/Vol03\\_Ch0121-0200D/HRS0195D/HRS\\_0195D-0005.htm](https://www.capitol.hawaii.gov/hrs/current/Vol03_Ch0121-0200D/HRS0195D/HRS_0195D-0005.htm)

Please see that developing Kamehameha Schools Bungalow Resort in Keaouhou Bay WILL threaten endangered species due to the unavoidable development and golf course pollution runoff that would happen a lot more often due to taking out the natural pollution filter, that is the trees and the land that is there now.

"The golf industry uses approximately 50 pesticide active ingredients, including chlorpyrifos—an insecticide that is banned for residential use by the EPA due to developmental hazards. Having to trim golf turf to low heights also makes it even more vulnerable to pests, which leads to more pesticide use." <https://rainorshinogolf.com/pages/the-environmental-impact-of-golf-courses>

These pesticides will be in the pollution runoff that will enter Keaouhou Bay more severely because of the bungalow resort development's pavement. As of right now the trees and land that this development wants to clear and develop into a bungalow resort is a Natural Pollution Filter.

Please read from Wikipedia "

**Most drains have a single large exit at their point of discharge (often covered by a grating) into a canal, river, lake, reservoir, sea or ocean. Other than catchbasins, typically there are no treatment facilities in the piping system."** [https://en.wikipedia.org/wiki/Storm\\_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20dry%20wells](https://en.wikipedia.org/wiki/Storm_drain#:~:text=Most%20drains%20have%20a%20single%20discharge%20into%20individual%20dry%20wells)

It's the pavement that this development wants to put in that will cause a lot of pollution to runoff into Keaouhou Bay because this top land that is directly below the golf course (that they want to clear) soaks in the golf course pesticides, fertilizer, weed killer... and is the BEST AND ONLY PROTECTION POLLUTION FILTER Keaouhou Bay has from the golf course pollution.

Please see this site at <https://health.hawaii.gov/epo/files/2013/09/Stormwater-MS4-Presentation-HEE-7.15.14.pdf> because on page 2 it states from the Hawai'i government that Natural Ground Cover has 10% runoff, where has development has 55% runoff.

These trees and land are saving monk seals and green sea turtles habitat from the golf course pollution and this land **MUST BE PRESERVED and CONSERVED** as the natural protector for Keaouhou Bay hence, **for these endangered species habitat.**

**Under Section 2 (b) of the Endangered Species Act** - Keauhou Bay MUST BECOME a CONSERVATION AREA for these endangered species because it is their habitat as of today, and to allow a resort development to be built above this bay would threaten the very lives of these endangered species because it will allow golf course toxic pollution and development pollution to run into these species natural habitat, which is Keauhou Bay.

Keauhou Bay has trees and land just under the golf course (that Kamehameha Schools wants to clear for their bungalow resort) that protects Keauhou Bay from a lot of algae blooms because it soaks up pollution that is runoff from fertilizer, weed killer... in the golf course, and unfortunately when there is a severely heavy rain storm the land up on top of the bay has a greater runoff than normal from the golf course pollution, and pollution foam and algae blooms happen because of it.

If you clear this land, this kind of algae bloom will happen a lot more often and end up killing a lot of coral and marine life as stated in the many articles that will follow.

One of these articles is in the Global Coral Reef Alliance. They researched the reef before and after a golf course development, and even though this development is not a golf course development, it is still a development and it will also be located just under a golf course and this will allow the pollution from the golf course to come down to the bay a lot more often because the natural land that soaks up this pollution will be gone.

**Has this EIS done any kind of research about the algae blooms that happen after a serious storm because of the golf course runoff pollution?**

This information was taken from Global Coral Reef Alliance and it is an actual study on the how coral and marine life are affected before and after development. It's titled, "Golf courses kill coral reefs and fisheries: harmful algae blooms and disease cause by nutrient runoff from golf course development on Guana Cay, Abaco, Bahamas

Introduction: Bahamas coral reef deterioration

This study is thought the first ever to evaluate the health of coral reef ecosystems and fisheries before and after a golf course development..The vast majority of corals have died from a combination of factors including global warming, new diseases, land-based sources of pollution.. " <https://www.globalcoral.org/golf-courses-kill-coral-reefs-and-fisheries-harmful-algae-blooms-and-disease-caused-by-nutrient-runoff-from-golf-course-development-on-guana-cay-abaco-bahamas/>

If you allow a Bungalow Development in Keauhou Bay you WILL be agreeing to pollute this bay for years to come and COMPLETELY CHANGING KEAUHOU BAY'S ECOSYSTEM because the golf course runoff won't have the best protection which is the natural trees and land that can soak up the polluted water most of the year and polluted foam algae blooms will happen a lot more often.

Here is another study by the Coral Reef Alliance titled. "Golf course fertilizer runoff causes nutrient enrichment leading to harmful algae blooms on a Bahamian coral reef

...After construction new algae blooms appeared nearest the golf course green, smothering corals in adjacent reefs, along with sharply increased coral diseases..." <https://www.globalcoral.org/golf-course-fertilizer-runoff-causes-nutrient-enrichment-leading-to-harmful-algae-blooms-on-a-bahamian-coral-reef>

**Does this EIS have any studies or reports on the extra runoff pollution due to clearing land and adding pavement?**

This needs to be fully known because you will be changing an entire ecosystem to build a bungalow resort. Because it rains in Keauhou Bay many nights out of the year and the land they want to clear absorbs the golf course toxins so this bay is not as severely polluted as it will be with pavement and development, and when serious storms come Keauhou Bay won't stand a chance because the land can't keep ALL golf course pollutions out during this time and pavement won't even come close.

"If there are **toxic algal blooms**, like red tide, or man-made contaminants, like pesticides or detergents in the water, those toxins are contained within the bubbles of sea foam. When those bubbles pop, the toxins can become airborne and compromise the air that is breathed in that location." <https://oceanconservancy.org/blog/2023/03/31/what-sea-foam/>

**Federally Protected Green Sea Turtle Swim in Keauhou Bay Often**

The green sea turtle that is federally protected and can be seen in Keauhou Bay weekly. Please see the following article that states "POLLUTED RUNOFF IN HAWAII ENDANGERS GREEN SEA TURTLES

**Why does Hawaii have a runoff problem?**

Historically, in the tropics of Hawaii, precipitation was absorbed into the soil, according to the Clean Water Branch of Hawaii's Department of Health. Any potential pollution or contaminants on the ground surface would get pushed into the soil by the rain, and plant roots and microbes would help break down the pollution into less dangerous components. However, with urban and agricultural development, less and less of the pollution gets pulled into the soil, and more of it gets washed out into storm drains. From there, the pollutants make their way to streams, rivers and the ocean that surrounds Hawaii. According to the state agency, most of these contaminants are nutrients from fertilizer, bacteria from animal waste, oil, garbage and yard waste...

If polluted runoff reaches the ocean, it can wreak havoc on marine life, including endangered green sea turtles." Taken from <https://www.chemservice.com/news/polluted-runoff-in-hawaii-endangers-green-sea-turtles/>

If you allow this development it WILL POLLUTE Keauhou Bay as the above article (that was written in 2014 because runoff water from developments were polluting the ocean even

them) states, and this bay holds many sea creatures such as the protected green sea turtle, spotted eagle rays, manta rays, octopus, dolphins, fish, coral, monk seals that have rested on the dock before and...that will ALL be harmed by the more severe pollution runoff that WILL happen because developments can't help but pollute the water nearby.

Keauhou Bay is known as a RESTING AREA for the ENDANGERED MONK SEAL, and if a resort is allowed to be built, that will bring a lot more people down to Keauhou Bay and if a monk seal is resting they most likely will disturb the monk seal with their selfies because it is fully known this is now a SELFIE CULTURE.

**Has the EIS done any research on what a high population would do in such a small area, and what will happen to the endangered species that live there because it's their habitat and a high population will change this bay forever?**

This information is by NOAA Scientist. "Study shows selfie culture impacts how people behave when posting images of an endangered species on social media.

There's a seal on the beach! Let's go get a 'selfie'!" That must have been what nearly 18 percent of people on Instagram thought before approaching an endangered species. In a recent study, NOAA scientists used social media to monitor human activities around endangered Hawaiian monk seals. They discovered that human disturbance is more common than they thought." <https://www.fisheries.noaa.gov/feature-story/endangered-hawaiian-monk-seals-cry-foul-over-selfies>

NOAA clearly states a high population in a place where monk seals and sea turtles habitat can be a serious disturbance for these endangered species.

**Has the EIS done any research or reports on the Resources and Infrastructure it will need for a bungalow resort?**

There are many big housing developments currently under construction in Kailua Kona, Waikoloa Village, in Hilo, Puna, and there are Ocean View and Volcano housing construction projects as well. The entire Big Island has construction projects all over.

**Has Kamehameha Schools EIS done any kind of reports or surveys to know if Big Island has the Resources and Infrastructures for their resort development?**

Because, "Hotel waste management refers to all the practices and processes that hotels implement to handle and dispose of the multiple types of waste generated on their premises.

Worldwide, hotels produce almost 300,000 tonnes of waste each year." <https://www.homebiogas.com/blog/hotels-waste-management/>

As of now, the Big Island's Resources and Infrastructure are having serious negative issues and many more developments that have been approved are not even completed as of yet,

which means these resources and infrastructures will be taxed even more in the near future.

Please read the below articles that prove that Big Island doesn't have the resources or infrastructure for a Bungalow Resort Development because it will increase the need for resources and infrastructure that the island doesn't have as of today.

**Big Island Now poll No. 27 results: More than one solution needed to help extend life of West Hawai'i landfill**

September 17, 2023

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years. (File photo)

Of the 900 total votes in our most recent poll, which asked people to weigh in on the best way to extend the life of the Big Island's [only remaining landfill](#), all of the above was the most popular answer, garnering 274 votes, or 30%.

The West Hawai'i landfill became the island's only one after the Hilo Landfill closed three years ago. It only has about 20 to 25 years left before it can no longer be used to store rubbish.

<https://bigislandnow.com/2023/09/17/big-island-now-poll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

**A county commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill**

By [Megan Moseley](#) September 6, 2023

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill.

During a commission meeting on July 26, Ramzi Mansour, Hawai'i County Director of Environmental Management, told commissioners the West Hawai'i Sanitary Landfill only has 20 to 25 years left before it reaches capacity.

With the Hilo Landfill permanently closed in 2020, the clock is ticking for the island's sole dump. Commission chairperson Georjean Adams said it's a good time to start looking into solutions.

Adams said the proposed ordinance is in its early stages and is more about getting the conversation started about how to prevent unnecessary, or recyclable items — green

waste, metals, plastics, paper, paperboard and glass — from ending up in the rubbish dump, located off Queen Ka'ahumanu Highway in Waikōloa.

"Trying to site a new landfill is close to impossible," Adams said. "So what are we going to do? So I was looking around, and the commission agreed, to look deeply into the idea of diverting the recyclables out and at least slow the filling up of the landfill."

The proposed ordinance refers to the 2019 Integrated Solid Waste Management Plan that commits the county to "divert, as much as feasible, commercial and municipal solid waste, including but not limited to green waste, metals, plastics, paper, paperboard, and glass to help achieve goals related to climate resiliency, renewable energy, sustainable agriculture, and zero waste."

<https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

#### Time's Up For Landfills

**'Gentle' demolition strategies can help preserve resources**

PAULA BENDER April 2, 2024

As Hawai'i government officials grapple with the challenge of limited landfill space statewide, federal restrictions set in place by the Environmental Protection Agency are ruling out possible locations that were once considered for new landfills.

Hawaii Act 73 states landfills must be located at least half a mile from residential areas; are prohibited from being located in areas with heavy rain and steep slopes, as well as agricultural and/or conservation lands; above aquifers; 300 feet beyond streams; and 1,000 feet beyond the ocean.

New landfills are also now prohibited from being created in tsunami inundation zones, 100-year flood zones and wetlands. There are also concerns that landfills near airports will attract birds, resulting in damage to aircraft and fatalities among pilots and passengers.

The City & County of Honolulu is in the process of identifying its next landfill and it doesn't want one any bigger or more active than absolutely necessary.

<https://buildingindustryhawaii.com/2024/04/times-up-for-landfills/>

**Drought Conditions On Hawai'i Island Prompt Water Supply Message**

by Big Island Video News  
on Oct 5, 2023 at 3:59 pm

**(BIVN)** – With moderate to severe drought conditions being reported across Hawai'i island, local water department officials issued a statement this week on the need for customers to use drinking water wisely.

Most of Hawai'i island is under "Moderate Drought" conditions, according to the latest information [from the U.S. Drought Monitor](#). There is an area under "Abnormally Dry" conditions in South Kona, however there are other, small pockets on the Big Island that are under "Severe Drought". There is even a small spot of "Extreme Drought" in the South Point area of Ka'ū.

"The National Weather Service's forecast calls for the existing drought conditions to expand over the entire island and intensify over the upcoming months due to the ongoing El Niño event," reported the Hawai'i County Department of Water Supply. "Peak dryness is expected to occur from around January through February 2024. The El Niño event will likely persist well into spring 2024."

From a Water Supply news release:

<https://www.bigislandvideonews.com/2023/10/05/drought-conditions-on-hawaii%CA%BB-i-island-prompt-water-supply-message/>

U.S.

**Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues**

By [Li Cohen](#)

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

And recent years have seen compounding problems: less rain, leading to [significant droughts](#), and repeated jet fuel leaks and PFAS chemical spills contaminating water systems. All of this significantly limits available water use for locals, many of whom say tourism is only worsening the situation. Just months ago, the [world's largest surfing wave pool](#) opened up on the island — filled with freshwater.

"They're not using it to drink or to support life, they're using it to make money. They're commodifying it," said Healani Sonoda-Pale, who is Native Hawaiian and a member of advocacy group O'ahu Water Protectors. " ... We are on the verge of a greater catastrophe."

"We are in a [water crisis](#), that has to be made very clear," Wayne Tanaka, director of Sierra Club of Hawai'i, told CBS News, saying that if the reasons for this crisis aren't soon addressed, "**We may come to a point where we have to decide ... who gets water and who doesn't.**"

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

Because this is an island parts need to be shipped and the power plant has generators that are not working and because of this, and other reasons, the Big Island needs to seriously conserve power so that everyone will have power, and if this problem of shipping parts can happen once it can happen again.

#### UTILITIES

UPDATE: HECO asks for continued energy conservation

BY SPECTRUM NEWS STAFF HAWAII ISLAND

UPDATED 6:28 PM ET APR. 16, 2024 PUBLISHED 9:05 AM ET APR. 15, 2024

HILO, Hawaii — Hawaiian Electric continues to urge Hawaii Island customers to reduce their electricity use to prevent the need for rolling outages.

In a news release Tuesday afternoon, the utility stated that Monday saw a reduced demand of approximately 5 megawatts. That, combined with increased wind and solar battery storage prevented the need for rolling blackouts on Monday. HECO credited conservation efforts, particularly those by large businesses and government customers, for the reduction in electricity demand.

"We're grateful for our customers' efforts to conserve electricity, especially between 5 to 9 p.m., when electricity use is highest, because it does make a difference," said Hawaiian Electric spokesperson Kristen Okinaka. "By working together, we're helping to ensure that enough power can be available for all customers and prevent or minimize the impacts of rolling outages."

Hawaiian Electric announced Monday afternoon that it may initiate rolling outages in parts of Hawaii Island because of the unavailability of several generators and lower than normal wind and solar resources.

In a news release, the utility said that outages could start as early as 6:30 p.m. and rotate around the island for 30-minute intervals. The impacted areas and the timing of the outages will be based on wind generation and the amount of electric demand that needs to be reduced. Individuals who are dependent on electrically powered life support medical equipment are advised to arrange for a backup power supply.

The outages are being done to prevent power loss to even more customers, who are all being asked to conserve electricity throughout the month.

<https://spectrumlocalnews.com/hi/hawaii/news/2024/04/15/heco-customers-on-hawaii-island-asked-to-conserve-power>

**Big power supply problems continue to plague Hawaii island**

Apr 8, 2024

The company has been facing an unusual situation with mechanical problems at three of the island's five largest power plants while part of the largest plant undergoes an annual overhaul. All four of these affected power plants are owned by the utility or an affiliate of its parent company.

**Also contributing to the trouble is lower output from a geothermal plant, which has the third-largest generation capacity on the island and is owned by an independent operator.**

"This is an unusual situation, driven mainly by the unavailability of several large generators that have experienced mechanical problems, are at reduced output, or are undergoing maintenance," Hawaiian Electric said in its March 25 announcement asking customers to use less electricity, especially on weekdays from 5 to 9 p.m.

The company explained that it faces an "extremely tight" supply of power at peak use periods, especially when production from wind, solar and hydroelectric facilities is lower than normal. Those sources of variable, renewable energy can supply up to 15 % of electricity needs on the island.

"Without enough supply to meet electricity demand, the company may initiate rolling outages of up to an hour around the island," the March 25 announcement said.

<https://energycentral.com/news/big-power-supply-problems-continue-plague-hawaii-island>

Hawaii Island customers urged to reduce electricity use through April

BY SARAH YAMANAKA HILO PUBLISHED 9:00 AM ET MAR. 26, 2024

#### What You Need To Know

**-Hawaii Island customers may see alerts asking them to conserve energy, especially on days when there isn't much wind that generates up to 15% of electricity**

-When alerts are issued, Hawaiian Electric is asking customers to take immediate action to minimize electricity use

-Even when no alerts are issued, customers — including hotels and large retailers — are urged to reduce electricity use as much as possible, especially between 5 and 9 p.m. on weekdays

-If there is not enough electricity to meet demand, Hawaiian Electric may initiate rolling outages of up to an hour around the island

<https://spectrumlocalnews.com/hi/hawaii/news/2024/03/25/hawaii-island-customers-urged-to-reduce-electricity-use-through-april>

**Does this EIS have any detailed traffic studies for the increase in cars that will be added to this already severely traffic area they want to build their 150 room bungalow resort in? Have they done any studies on the pollution these cars WILL have in Keaouhu Bay?**

**Because this Bungalow Resort could have over 150 extra cars and over 300 or more extra people in and out of Keaouhu Bay, what traffic and increased population studies have they done? Because they will have employees with cars, guests with cars, visitors with cars and this would range at times at least over 200 cars or more, parking above Keaouhu Bay causing serious car population because of all these added cars right next to the bay.**

Article below is from NOAA.

**What is the biggest source of pollution in the ocean?**

**Most ocean pollution begins on land.**

"Millions of motor vehicle engines drop small amounts of oil each day onto roads and parking lots. Much of this, too, makes its way to the sea.

Some water pollution actually starts as air pollution, which settles into waterways and oceans. Dirt can be a pollutant. Top soil or silt from fields or **construction sites can run off** into waterways, harming fish and wildlife habitats." <https://oceanservice.noaa.gov/facts/pollution.html#:~:text=Millions%20of%20motor%20vehicle%20engines,Dirt%20can%20be%20a%20pollutant.>

Land-Based Runoff Remains Top Source of Oil in the Ocean, Says New Report Oil in the Sea: Inputs, Fates, and Effects

**News Release September 28, 2022**

WASHINGTON — Oil in runoff, primarily from cities and vehicles, is the top source of oil entering the ocean, says a [new report](#) from the National Academies of Sciences, Engineering, and Medicine. In North American waters, estimated ocean oil pollution from land-based runoff is up to 20 times higher than it was 20 years ago, and oil spills, natural oil seeps, and discharge from oil and gas operations remain major sources of pollution. The report recommends actions that government and others should take to minimize oil pollution, and calls for sustained research funding to better understand how oil reaches and affects ocean environments. <https://www.nationalacademies.org/news/2002/05/oil-in-the-sea-inputs-fates-and-effects#:~:text=WASHINGTON%20%2D%20early%2085%20percent,pipeline%20sills%2C%20savs%20a%20new>

The Impact Of Stormwater – Car Emissions

"Car emissions are not limited to exhaust fumes that contribute to air pollution. They can also leak automotive fluid and release heavy metals that can contribute to stormwater pollution, contaminating local waterways." <https://www.stormwatershepherds.org.au/blog/the-impact-of-stormwater-car-emissions/>

**Does this EIS have any reports on the noise pollution that will happen and what it could do to marine life in Keaouhu Bay during development?**

Because if you allow this Bungalow Resort to be developed you will increase constant noise in this bay for years to come and, "Noise Pollution Research shows that underwater noise from construction, shipping and naval vessels significantly impacts the natural behaviour of cetaceans and many other marine species. This can be seen when mass beaching events occur or breeding success is diminished."

The above information was taken from the Ocean Conservation Trust <https://oceanconservationtrust.org/ocean-advocacy/think-ocean/ways-to-think-ocean/>

[OCEANS POLLUTION](#)

How Does Noise Pollution Harm Marine Species?

"However, over the past few decades, noise pollution in the marine environment has increased dramatically and is threatening the natural soundscape of the marine environment. Ships, seismic surveys, explosions, construction, and sonar devices have made the once peaceful environment into a loud, chaotic home which is extremely damaging for marine wildlife. This type of pollution is often overlooked in comparison to others but its impacts are now being documented across all types of marine ecosystems." <https://earth.org/noise-pollution-in-the-ocean/>

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#:~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20nearshore%20fish%20populations.>

**What is ocean noise?**

"Ocean noise refers to sounds made by human activities that can **interfere with or obscure** the ability of marine animals to **hear natural sounds in the ocean**.

Many marine organisms rely on their ability to hear for their survival. Sound is a highly efficient means of communication underwater and is the primary way that many marine species gather and understand information about their environment. Many aquatic animals use sound to find prey, locate mates and offspring, avoid predators, guide their navigation and locate habitat, as well as to listen and communicate with each other.

Over the last century, human activities such as shipping, recreational boating, and energy exploration have increased along our coasts, offshore, and deep ocean environments. Noise from these activities can travel long distances underwater, leading to increases and changes in ocean noise levels in many coastal and offshore habitats.

These rising noise levels can negatively impact ocean animals and ecosystems. Higher noise levels can reduce the ability of animals to communicate with potential mates, other group members, their offspring, or feeding partners. Noise can also reduce an ocean animal's ability to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigating to preferred habitats."

<https://oceanservice.noaa.gov/facts/ocean-noise.html>

**The Chesapeake Bay has a foundation that is trying to save it due to runoff pollution that was caused by developments, and the Chesapeake Bay is a lot bigger than Keauhou Bay.** If it's being drastically hurt by runoff water from developments, Keauhou Bay waters won't stand a chance if development above the bay is allowed because this bay is very small.

This Article is by the Chesapeake Bay Foundation, Saving a National Treasure states, "**...runoff is a significant source of harmful nitrogen pollution that continues to grow ...**

As rainwater and snowmelt run off our streets, parking lots, lawns, and other surfaces, they pick up pet waste, pesticides, fertilizer, oil, and other contaminants. If the draining water doesn't evaporate or soak into the ground where it can be filtered, it flushes straight into local creeks, rivers, and the Chesapeake Bay, adversely affecting water quality and aquatic life.

**Only 10 to 20 percent of rain that falls in forests, fields, and other natural areas runs off, with the rest absorbed by soil and plants, where it is filtered before reaching aquifers or local waterways. (Right now Keauhou Bay has a lot of trees and is very natural, this is what helps stop runoff.) By contrast, close to 100 percent of the rain that falls on concrete and other hard surfaces produces runoff. One inch of rain falling on an acre of hardened surface produces 27,000 gallons of runoff.**

Stormwater runoff pollution threatens Chesapeake Bay and it's rivers and streams....Polluted runoff is one of the most harmful sources of pollution to the Bay and its waters. And much of it starts right in the urban and suburban neighborhoods where we

live." <https://www.cbf.org/issues/polluted-runoff/index.html#:~:text=Besides%20carrying%20pollutants%20that%20harm,them%20are%20placed%20in%20eopardy.>

**If that is what runoff is doing to the Chesapeake Bay, the effects of runoff will be even more devastating to Keauhou Bay because it is so much smaller than the Chesapeake Bay.**

**Are there any reports in this EIS about what the impact to the coral, marine life, plankton especially zooplankton will be because of this development?**

**Because the studies below show developments kill coral, marine life and zooplankton are kill and negatively affected as well, and zooplankton is the manta ray food. Manta rays are in this bay every night to eat zooplankton and sometimes they are in this bay during the day time too.**

If you allow this bay to be development you will be allowing all types of marine life to die and there is NO WAY to stop this from happening because polluted runoff rain water from developments can't be fully stopped. It is what has happened in ALL coastal developments.

Please read the Scientific proof below.

It's Been Proven Developments Severely Pollute Nearby Waters

Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Coral Bleaching is occurring more frequently in Hawai'i. Across the Hawaiian Archipelago, coral bleaching has increased in frequency and severity since 1996. The last major bleaching event in 2014-2015 had catastrophic Impacts state-wide..."

This was the third major bleaching episode in Hawai'i over the last 6 years. The frequency of these events is unprecedented in the archipelago. NOAA scientists and partners have determined that the key drivers of the bleaching were environmental factors (such as heat stress, depth, and surface light) and human impacts (sewage effluent and urban runoff). "<https://www.fisheries.noaa.gov/feature-story/cautionary-tale-2019-coral-bleaching-event-hawaii#:~:text=Coral%20bleaching%20is%20occurring%20more,hard%20catastrophic%20impacts%20state%20wide.>

This article is by the Coral Reef Alliance here in Hawai'i. "An ecosystem under threat Hawai'i's reefs face major global and local threats including climate change, overfishing, and sediment and nutrient pollution caused by sewage and stormwater runoff..."

When it rains, flash floods carry stormwater and large amounts of sediment downstream to the ocean. Just offshore, once-thriving coral reefs are now struggling to survive." <https://coral.org/en/where-we-work/hawaiian->

[islands/#:~:text=Hawai%CA%BBi,s%20reefs%20face%20major%20lobal,into%20Hawai%CA%BBi,s%20waterways%20every%20day.](#)

This article states that runoff is a leading source in coral degradation. Article by National Oceanic and Atmospheric Administration, AKA NOAA, "Land-based sources of pollution are a leading cause of coral reef degradation in the Main Hawaiian Islands. Water quality is impacted by urban runoff, failing sewage systems, unpaved roads, farms, land clearing, and development." [https://www.coris.noaa.gov/monitoring/status\\_report/docs/Hawaii\\_status\\_report\\_forweb.pdf](https://www.coris.noaa.gov/monitoring/status_report/docs/Hawaii_status_report_forweb.pdf)

This article is a Research Article by PLOS ONE and their motto is, "We're driving change in research integrity and publication ethics." This is some of their article information, "Coral taxonomy and local stressors drive bleaching prevalence across the Hawaiian Archipelago in 2019..."

We found little evidence for acclimation by reefs to thermal stress in the main Hawaiian Islands. **Moreover, our findings illustrate how detrimental effects of local anthropogenic stressors, such as tourism and urban run-off, may be exacerbated under high thermal stress.** In light of the forecasted increase in severity and frequency of bleaching events, future mitigation of both local and global stressors is a high priority for the future of corals in Hawaii!" <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269068>

The coral all over Hawai'i has had extremely high mortality rates, due to developments near ocean areas throughout the years, and development in Keauhou Bay will be devastating to the coral, reef fish, and all Aquatic Life there, and even the Manta Rays that go there to eat zooplankton from the Manta Ray tours at night, and they eat it during the day in that area as well because they need to eat 5 times their body weight in zooplankton daily. Please see the cited information below.

**"SO, HOW MUCH PLANKTON DOES YOUR AVERAGE MANTA RAY EAT? 19,200,000. Nineteen million two hundred thousand, give or take a few thousand.**

That is the number of plankton pieces a ten-foot manta ray must consume weekly to stay alive."

The above information was taken from Manta Ray Advocates <https://mantarayadvocates.com/how-much-plankton-do-mantas-eat/>

**Coral reefs are known to be highly negatively impacted by developments because, impacts from land-based sources of pollution including coastal development,...can impede coral growth and reproduction, disrupt overall ecological function, and cause disease and mortality in sensitive species."** <https://oceanservice.noaa.gov/facts/coral-pollution.html#:~:text=Impacts%20from%20land%20based%20sources,and%20mortality%20in%20sensitive%20species.>

Article by Environmental Evidence, "Coastal development and runoff lead to sedimentation, which directly impacts coral recruitment, growth, mortality, and ecosystem services that coral reefs

provide." <https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-020-00200-0>  
0#:~:text=Coastal%20development%20and%20runoff%20lead,services%20that%20coral%20reefs%20provide.

Developments can't fully stop polluting because runoff is from rain during development and after. Article by NOAA, "One of the most significant threats to reefs is pollution. Land-based runoff and pollution discharges can result from dredging, coastal development...This runoff may contain sediments, nutrients, chemicals, insecticides, oil and debris.

When some pollutants enter the water, nutrient levels can increase, promoting the rapid growth of algae and other organisms that can smother coral." [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,organisms%20that%20can%20smother%20corals.)

Another article by NOAA, "Coral reefs also are affected by leaking fuels, anti-fouling paints and coatings, and other chemicals that enter the water... (All of those are show up in every development project)

Among the most damaging pollutants on coral reefs is sediment, which can remain suspended in the water or be deposited on the coral surface (i.e., turbidity and sedimentation, respectively) and can contain toxicants, pathogens, and nutrients, all of which impact coral growth, recruitment, and survival" [https://oceanservice.noaa.gov/education/tutorial\\_corals/coral09\\_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.](https://oceanservice.noaa.gov/education/tutorial_corals/coral09_humanthreats.html#:~:text=This%20runoff%20may%20contain%20sediments,into%20the%20atmosphere%20within%20days.)

It's Been Proven Resort Developments KILL Marine Life

The manta rays go to Keauhou Bay every night to eat zooplankton and if you allow this development that WILL have runoff water, you WILL be causing zooplankton to be seriously affected because as this article by MarinBIO states, "Zooplankton are also sensitive to their environment and like phytoplankton—a change in zooplankton concentration can indicate a subtle environmental change. Zooplankton are highly responsive to nutrient levels, temperatures, pollution, food that is not nutritious, levels of light, and increases in predation. As well as providing an essential link in the marine food chain (which is an understatement), the diversity of species, amount of biomass and abundance of zooplankton communities can be used to determine the health of an ecosystem..."

Here is another article that proves runoff from development in this area will hurt and kill plankton, by **Frontiers in Marine Science, "Effects of an experimental terrestrial runoff on the components of the plankton food web in a Mediterranean coastal**

lagoon The main result observed in the present study was that the effects of the simulated terrestrial runoff spread along the plankton food web, significantly affecting all trophic levels of the natural plankton community studied. This occurred in a relatively short time considering that the experiment lasted less than three weeks. The lower light availability in the terrestrial runoff treatment compared to the control resulted in a net decrease of approximately one-third of Chl-*a* concentration and phytoplankton abundance over the entire experiment." <https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1200757/full>

"Zooplankton are also affected by levels of pH, heavy metals, calcium, and aluminum. Nutrients like nitrogen and phosphorus will affect the prey of zooplankton (like algae, protozoa and bacteria), indirectly affecting zooplankton survival. Scientists are still putting together pieces of the zooplankton puzzle. Some questions include how nutrient levels found in algae can influence the growth and behavior of zooplankton. Another question important to marine and human life is how toxins and pollution will affect this crucial link in the food chain" This information is in article by MarineBIO. <https://www.marinebio.org/creatures/zooplankton/#:~:text=Zooplankton%20are%20a%20sensitive%20to,light%20and%20increases%20in%20predation.>

Here is a research article by Environmental Research Laboratory, United States Environmental Protection Agency that discusses, "**Toxic Effects of Pollutants on Plankton** There are four main sources of aquatic pollution: industrial wastes, municipal wastes, agricultural run-off, and accidental spillage. Non-point sources, such as automobile exhausts, add appreciable amounts of pollutants to air that may enter aquatic systems in rainfall or dry fall-out. These sources add pesticides, heavy metals, oil, petroleum products, and a large number of organic and inorganic compounds to water. Lakes and oceans serve as sinks for many pollutants. Plankton comprise a large portion of the living matter in natural waters and function in biogeochemical cycles. They are affected by pollutants, transfer them to sediments and other organisms, and function in their biological transformation." [https://scope.dge.carnegiescience.edu/SCOPE\\_12/SCOPE\\_12\\_3.6\\_chapter12\\_257-274.pdf](https://scope.dge.carnegiescience.edu/SCOPE_12/SCOPE_12_3.6_chapter12_257-274.pdf)

The above articles show that development of Keauhou Bay WILL hurt plankton life in the area because of the pollutant runoff that WILL happen during the development and after, and if this happens this could cause the manta ray food source to disappear and that will be devastating for the manta rays eating habits, as well as cause the manta rays to not show up in this area, in turn taking away many lively hoods from locals on the island that depend on the manta ray tour for their income.

**Does this EIS have any reports on their resort adding to the population increase that happens during IRONMAN?**

"On average, each Ironman racer brings three people with them to the Big Island. Counting members of the media, VIPs who come from around the globe to watch and the triathlons

partners, there likely be more than 6,300 people descending on Kona." <https://bigislandnow.com/2023/10/07/ironman-2023-in-kona-shines-spotlight-on-some-of-best-women-triathletes-in-the-world/>

And "Resident dissatisfaction with tourists is multifaceted: The overwhelming majority (92%) of locals felt visitors were not educated enough on protecting Hawaii's natural environment and local resources; other factors include the impact of the vacation rental industry and ignorance of the residents' quality of life." <https://www.triathlete.com/culture/news/kona-locals-ask-ironman-visitors-for-respect/>

**Where are the EIS reports on human density because this resort will increase this area in population by hundreds. Below are reports that human population destroy coral reefs.**

"The number of people living on the coasts has rapidly increased in recent decades, causing significant development of coastal areas. Coastal development can negatively impact the ocean through the destruction of coastal marine habitat and through run-off of sediments and pollution.

-Coastal development involves activities such as the creation of harbors, stabilization of shorelines, and aquaculture that involve the **destruction of sensitive marine habitats** such as mangroves, coral reefs, and seagrass beds.

-Coastal development may cause the run-off of **sediments** into coastal habitats, which can smother corals or seaweeds and reduce the amount of light available for photosynthesis. Losses of primary producers and important habitat-forming species such as corals can negatively impact entire food webs."

The above information was taken from the Education Development Center, INC, from their Coastal Development page called Ocean Tracks <https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20may%20cause%20the,negatively%20impact%20entire%20food%20webs.>

There is nothing Kamehameha Schools can do to their development that can stop the guests of this possible Bungalow Resort from going to Keauhou Bay. Human traffic WILL seriously increase if this resort is allowed to be built and the marine life will be negatively affected by it. Marine life will suffer from this development as stated in this letter in many different scientific reported articles.

If you allow this resort the amount of people in this bay will fully increase and, "Hawaii's recent history has shown that the state's growing population can have an adverse effect on nearshore fish populations. Protecting this important resource for the enjoyment of future generations is essential. Ideally, management of the resource should balance the needs of different user groups, but the welfare of the marine environment on which its inhabitants

depend must be the most important consideration." This was taken from Hawaii's own Division of Aquatic Resources <https://dlnr.hawaii.gov/dar/marine-managed-areas/hawaii-marine-life-conservation-districts/#~:text=Snorkeling%20and%20SCUBA%20diving%20are,effect%20on%20near shore%20fish%20populations.>

It's Been Proven an Increase in Human Population Destroys Coral Reefs

If a Bungalow Resort is allowed to be built in Keauhou Bay, it will force bring a serious increase in human traffic. "Easily visible trends in human population dynamics combined with well-established and tested ecological theory give a clear, intuitive, yet quantifiable guide to the severity of survival challenges faced by coral reefs. Management challenges and required actions can be clearly shown and, contrary to frequent claims, no scientific ambiguity exists with regards to the serious threat posed to coral reefs by humankind's continued numerical increase." This is in the article by National Library of Medicine National center for Biotechnology Information PubMed. <https://pubmed.ncbi.nlm.nih.gov/33293007/#:~:text=Denser%20coastal%20populations%20and%20greater,0%20more%20runoff%20and%20siltation.>

This article is by ABC NEWS, "This is how tourists are destroying coral reefs in Hawaii The less people at a certain site, the more coral there are, the research found. The millions of tourists who flock to the shores of Hawaii every year are wreaking havoc on its natural environment -- especially the coral reefs, which are at risk all over the world, a new study said. The most popular coral reefs on the Hawaiian islands are likely being degraded by the very visitors they attract, according to a study published Monday in Nature Sustainability." <https://abcnews.go.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20there%20are%20the%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%20the%20new%20study%20said.>

If you allow this resort to be developed, you will be destroying the coral reefs in the bay because this bay is extremely small and used by a lot of locals already for fishing, canoeing, swimming, snorkeling, paddle boarding, surfing, boating...it can't afford more use by many thousands more people yearly.

If you allow Keauhou Bay to be development there will be a higher population in the bay and that will hurt the coral in the bay as well, because it's known that, "Denser coastal populations and greater wealth will lead to reef degradation by coastal construction. Denser populations inland will lead to more runoff and siltation. Effects of human perturbations can be explored with metapopulation theory since they translate to increases in patch-mortality and decreases in patch-colonization (= regeneration). All such changes will result in a habitat with overall fewer settled patches, so fewer live reefs." This information was taken from Science

Direct <https://www.sciencedirect.com/science/article/abs/pii/S00065288120300328#:~:>

[ex=EaQuaculture%20will%20allviate%20some%20fishing,0%20more%20runoff%20and%20siltation.](https://www.abcnews.com/US/hawaiian-coral-reefs-degrading-popular-tourist-sites-scientists/story?id=96308858#:~:text=The%20less%20people%20at%20there%20are%20the%20the%20research%20found.&text=The%20millions%20of%20tourists%20who,world%20the%20new%20study%20said.)

Another article by Nature Sustainability, "Coral reefs and coastal tourism in Hawaii Coral reefs are popular for their vibrant biodiversity. By combining web-scraped Instagram data from tourists and high-resolution live coral cover maps in Hawaii, we find that, regionally, coral reefs both attract and suffer from coastal tourism. Higher live coral cover attracts reef visitors, but that visitation contributes to subsequent reef degradation. Such feedback loops threaten the highest quality reefs, highlighting both their economic value and the need for effective conservation management." [https://www.nature.com/articles/s41893-022-01021-4.pdf?sharing\\_token=wsakeONhalhliAnWAq453tRgNOIAWle9mR3ZcTv0PvGzA5Jc\\_H00Lz4HNIP3ASnhcgKRv6\\_vfKLPw49d4mbY0xSg3Y1Mg0IGBZsapdGUH701SLbu9x5Pr3xEd4Kxl4T0silvg01aZ7ZRT3Hbraxp0d1d2AoNlSmW5uxB7HEDdJl80G1px7L1TWdGXvFKIIZYeNdcJf3Sw\\_dnaJg5ZlhcqPBDImmaH15yqT50%3D&tracking\\_referrer=abcnews.go.com](https://www.nature.com/articles/s41893-022-01021-4.pdf?sharing_token=wsakeONhalhliAnWAq453tRgNOIAWle9mR3ZcTv0PvGzA5Jc_H00Lz4HNIP3ASnhcgKRv6_vfKLPw49d4mbY0xSg3Y1Mg0IGBZsapdGUH701SLbu9x5Pr3xEd4Kxl4T0silvg01aZ7ZRT3Hbraxp0d1d2AoNlSmW5uxB7HEDdJl80G1px7L1TWdGXvFKIIZYeNdcJf3Sw_dnaJg5ZlhcqPBDImmaH15yqT50%3D&tracking_referrer=abcnews.go.com)

#### A Resort Development WILL Increase Traffic on Already Severely Trafficed Roads.

**Where are the traffic study reports for this EIS because with 150 rooms comes over 150 cars because you must include employee cars, as well as visitors for the people staying in the resort, and what if the guests have more than one car?**

The Big Island already has a serious problem with traffic on the island because of a lack of infrastructure that in places a bigger road can't be built due to cliffs on one side and homes on the other side.

Allowing another resort to be developed will bring more cars that will lead to a lot more traffic that the island can not handle, please read the articles below by different NEWS companies that prove this point.

This NEWS article by Hawai'i News Now, "Report shows alarming surge in Hawaii Island traffic deaths The Hawaii Police Department's Traffic Services Section released a new report showing a dramatic increase in both major crashes and fatal accidents from last year.

The startling statistics show a dramatic increase in the number of year-over-year traffic fatalities on the Island of Hawaii, revealing major crashes are up more than 12% and traffic fatalities are up more than 100%." Please watch their video on their link below because it is a professional report on Big Island traffic problems. <https://www.hawaiinewsnow.com/2024/05/18/new-report-shows-hawaii-island-traffic-fatalities-are-up-over-100-last-year/>

With more tourists comes more accidents, more traffic, and more traffic deaths. Please read this article by KHON 2 NEWS, "Hawaii Island has most traffic fatalities in state, This time last year Hawaii Island was at five traffic deaths, as of April 1, 2024, they're at 14.

Seven of which happened in the last two weeks...

Chief Moszkowicz said the police force is small compared to the size of the island and response times can take 15 to 20 minutes.

"We don't have the resources like in the small space of Oahu where you can saturate an area to control speeding, that just doesn't exist here," he added." <https://www.khon2.com/local-news/7-traffic-fatalities-for-hawaii-island-in-march/>

The traffic on Big Island has increased drastically and safety issues and infrastructure needs to be addressed before adding more resort developments.

Please read this article because what it says about Oahu is the same for Big Island. The traffic problems they talk about are the same issues here on Big Island, and this article also gives one Big Island example, "On the Big Island, the mayor had to issue an emergency order shutting down Waipio Valley Road due to overuse and poor prior maintenance." This is happening all over Big Island. <https://www.civilbeat.org/2024/02/angry-over-island-traffic-iams-lets-talk-about-solutions/>

Please, watch the NEWS video below on aerial footage in Hilo because the footage shown is the same thing that is happening on Alii Drive and Queen K HWY, and for the same reasons, all of these roads only have 2 lanes.

There are 2 developments already on Alii Dr. being built as of today, and more are scheduled for this road in the near future, and Alii Dr. and Queen K HWY are the roads Kamehameha Schools Bungalow Resort will be using if approved and they are already seriously congested.

These roads have the exact same traffic congestion as Hilo, with the exact same problems, traffic is extremely slow because of so many people who now live here and all the visitors that come year ly.

The worry on Kona side is tsunami evacuations rather than lava evacuations, and in this kind of traffic, not everyone will be able to get to safer ground, especially if you allow another resort to be developed in this area when traffic is already at a crawl every week day and sometimes on weekends as well.

See the photo below that proves this point in Kona, and here is the NEWS article by KITV NEWS that talks about Hilo and the same thing is happening in Kona on the roads Kamehameha Schools wants to develop their resort, "Hawaii Island traffic jams could have safety impact. In the event of an evacuation, Mayor Mitch Roth acknowledges that will make the Traffic Jam up even worse. But says, he is working with The State on a solution." [https://www.kitv.com/news/local/hawaii-island-traffic-iams-could-have-safety-impact/article\\_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html](https://www.kitv.com/news/local/hawaii-island-traffic-iams-could-have-safety-impact/article_b06a5374-5a6a-11ed-8d23-8313ef8c4c19.html)

There was a crash on Alii Dr. and when there is an accident on this road, it turns into only one lane that needs a flagger to help direct traffic. and that adds even more traffic to this

already seriously congestion road, and Kamehameha Schools wants to add a resort on this road that will increase the traffic by 100's of cars.

Here is the Island News video on the crash on Alii Dr. <https://www.youtube.com/watch?v=FO5snPDii8>

Please see from these articles that traffic on Big Island is deadly already and adding another resort will be devastating to the island.

Please read this Path article, HAWAII COUNTY'S VISION ZERO INITIATIVE

A motorcyclist is in critical condition after a collision with a car. A driver accidentally hits and kills a pedestrian. It seems that not a day goes by without the news reporting on a traffic crash on Hawai'i Island...

Here are some other statistics that are even more staggering:

-28% of roadside crashes were the result of someone leaving the roadway and going into barriers or trees

-13% of pedestrians hit at 20 mph actually suffer fatality

-73% of pedestrians hit at 40 mph suffer fatality

-25% of fatal crashes were the result of distracted driving... So PLEASE put those cell phones away and pay attention to the road!

-56% of fatal crashes were the result of alcohol or drugs

-41% of fatal crashes occurred in light trucks and vans

-49% of crashes occur during the day, outside of peak traffic hours

-Of all the crash fatalities, most were males between 20 to 24-years old.

"That's just Big Island traffic," is a common sentiment. But what if we didn't have to accept this endangerment of vehicle drivers, motorcyclists, and pedestrians as a way of life?"

This was taken from Path as well as The Law of the Splintered Paddle below <https://pathhawaii.org/hawaii-countys-vision-zero-initiative/>

### **The Law of the Splintered Paddle**

Hawaiian history tells us that young Kamehameha was once an aggressive chief. The story goes that the young chief even chased after two fishermen in a Puna fishing village. While

pursuing them, his foot got stuck in a crevice, and one of the fishermen struck Kamehameha over the head with his paddle in defense, which splintered into pieces.

After the incident, Kamehameha recognized that it was wrong to misuse his power and learned compassion. Years later, Kamehameha declared a new law, "[Kūhūwāiʻāmalahoe](#)" or "the Law of the Splintered Paddle." Meant to protect the innocent and vulnerable from unprovoked attacks, this law proclaimed that the defenseless (especially kūpuna and keiki) across Hawai'i be able to sleep safely on the side of the road, unharmed.

The law provided for the safety of non-warriors during wartime and became the first written law of the Kingdom of Hawai'i. After being added back in 1978, the law is part of Hawai'i's State Constitution today.

It is symbolic of servant leadership, reinforcing the importance of:

- Caring for and serving one's people
- Knowing and doing what is pono (right)
- Standing for the principle that leadership privilege is earned
- Taking kuleana (responsibility) for those we serve
- Doing so with compassion, love, and respect

"We take that to mean that anyone who uses our roadways should be able to do so without fear of harm," explains Tina."

**The Law of the Splintered Paddle is also on Kamehameha Schools website**, so they should want to help make Big Island roads become safer and not add to the traffic and possible traffic death toll problem. <https://www.ksbe.edu/article/the-lessons-of-the-law-of-the-splintered-paddle-rng-true-200-years-after-k>

**Does this EIS have any reports about how this development will safely add to the land fill on Big Island, and are there reports proving the island has enough water for another big resort, what about reports on how much power this resort will use because the Big Island already has serious Resource and Infrastructure issues. Please read the articles below.**

**The Big Island Doesn't Have the Resources and Infrastructure for Another Resort**

Please see the articles below because the Big Island doesn't have the resources or infrastructure to safely add another resort development on island and these other NEWS and Research articles prove this point.

- 1) Hawaii Deals with Burgeoning Waste Management Problem

As landfills face closure and waste-to-energy projects stall, various counties in Hawaii are dealing with waste management issues. Waste360 Staff January 10, 2020

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled." <https://www.waste360.com/landfill/hawaii-deals-with-burgeoning-waste-management-problem>

- 2) "Big Island Now readers seem to agree that there's likely no single solution for slowing down the timeline of the West Hawai'i Sanitary Landfill reaching capacity.

The West Hawai'i Sanitary Landfill, the only remaining landfill on the Big Island, is forecast to reach capacity within the next 20 to 25 years." <https://bigislandnow.com/2023/09/17/big-island-now-noll-no-27-results-more-than-one-solution-needed-to-help-extend-life-of-west-hawaii-landfill/>

- 3) Hawaii Island Has Decades of Landfill Space But Still Faces Challenges In Dealing With Its Waste Hawai'i Public Radio Published January 9, 2020 at 5:00 AM HST

"Hawaii Island is in the enviable position of having a landfill with anywhere from 20 to 100 years of capacity left to take in trash. But the island still wrestles with significant issues like plastic products that are no longer being recycled.

For the past four decades, trash from the east side of Hawaii Island has been dumped in a landfill outside of Hilo. But now trash from all parts of the island is being trucked to a facility north of Kona." <https://www.hawaiipublicradio.org/local-news/2020-01-09/hawaii-island-has-decades-of-landfill-space-but-still-faces-challenges-in-dealing-with-its-waste>

- 4) "What happens to Hawaii Island's trash and recyclables? BY MICHELLE BRODER VANDYKE HAWAII ISLAND PUBLISHED 11:30 AM ET DEC. 17, 2022 By Michelle Broder Vandyke HAWAII ISLAND PUBLISHED 11:30 AM ET Dec. 17, 2022

The West Hawaii Landfill will be full in about 20 years. Finding a location for the next landfill is a concern, according to the DEM officials. They said it will be challenging to find a location for a future landfill because of stringent regulations and costs related to planning, environmental regulations, design and construction that will take many years to complete. It will also require community

support." <https://spectrumlocalnews.com/hi/hawaii/news/2022/12/15/what-happens-to-hawaii-island-s-trash-and-recyclables->

- 5) "The overwhelming plastic waste Hawaii visitors leave behind By Natasha Bourlin Aug 24, 2023

Hawaii saw more than 9 million visitors last year. Those tourists' first stops are often big-box and convenience stores, where they buy bottled water, plastic sand toys, single-use bodyboards, noodles, floaties and inner tubes for their trips." <https://www.sfgate.com/hawaii/article/plastic-waste-hawaii-visitors-leave-behind-18286076.php>

6) "A county commission drafts ordinance aiming to ban recyclables at West Hawai'i landfill By Megan Moseley September 6, 2023 · 1:00 AM HST

\* Updated September 6, 2023 · 2:02 PM

Hawai'i County's Environmental Management Commission is developing an ordinance that aims to prohibit the amount of recyclable materials ending up in the island's only working landfill." <https://bigislandnow.com/2023/09/06/new-draft-ordinance-aims-to-ban-recyclables-at-west-hawaii-landfill/>

7) "Hawai'i County issues mandatory 25% water restriction for North Kona August 7, 2023 · 5:21 PM HST

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend." <https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

8) "Hawai'i Water Supply Closely Monitored As Severe Drought Continues by Big Island Video Newson Nov 6, 2023 at 3:28 pm STORY SUMMARY

HAWAII COUNTY - Officials say a special focus will be placed on the South Kohala Water System, which is more susceptible to drought conditions." <https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawaii-CA%BB1-under-severe-drought/>

9) "Big Island Concerns About Water Quality Prompt A Lawsuit Over A Kona Sewage Plant Kealakehe sewage plant discharges more than 1 million gallons of wastewater into a lava pit near the ocean. By Paula Dobbyn / February 6, 2024

Settlement talks are scheduled in an environmental lawsuit involving a county-operated Big Island sewage plant in Kona." <https://www.civilbeat.org/2024/02/concerns-about-water-quality-prompt-a-lawsuit-over-a-kona-sewage-plant/>

10) "Researchers find sewage from an oceanfront Big Island community reaches nearshore waters Hawai'i Public Radio | By Russell Subiono, Sophia McCullough Published December 20, 2021 at 5:56 PM HST

There are nearly 50,000 cesspools on the Big Island, with tens of thousands posing a risk to water resources, according to the Hawai'i Department of

Health." <https://www.hawaiipublicradio.org/the-conversation/2021-12-20/researchers-find-sewage-from-an-oceanfront-big-island-community-reaches-nearshore-waters>

11) "Kona coast faces stark wastewater tradeoffs Current situation

There are approximately 88,000 cesspools across the state, releasing more than 200,000 cubic meters of wastewater per day to the environment. <https://www.hawaii.edu/news/2021/09/10/kona-stark-wastewater-tradeoffs/>

We ask that you start figuring out how this can never happen again? These are the kind of issues that need to be resolved before you approve more development.

12) "BIG ISLAND NEWS HECO restores power after initiating emergency outages on Big Island by: Elizabeth 'Ufi Posted: Jan 30, 2024 / 09:43 AM HST Updated: Jan 30, 2024 / 04:15 PM HST

An unexpected loss of several large Hawaii Electric generators left some residents on Big Island without power for parts of the morning on Tuesday, Jan. 30." <https://www.khon2.com/big-island-news/heco-initiates-30-min-rolling-outages-after-loss-of-generators/>

13) Hawai'i State News Update: Hawaiian Electric initiates rolling outages throughout Big Island February 13, 2024 · 5:23 PM HST  
\* Updated February 14, 2024 · 4:21 PM

The emergency outages are being initiated in various areas around the entire island to prevent loss of power to an even greater number of customers. The timing and extent of the outages will depend on the amount of demand on the system and the availability of generators." <https://bigislandnow.com/2024/02/13/hawaii-island-customers-asked-to-reduce-electricity-use/>

14) "LOCAL NEWS

HECO issues rolling power outages around Big Island by: Emily Cervantes Posted: Feb 13, 2024 / 05:11 PM HST Updated: Feb 13, 2024 / 09:12 PM HST Hawaiian Electric initiated rolling outages for Big Island after several large generators became unavailable and reduced output Tuesday night." <https://www.khon2.com/local-news/heco-releases-conservation-alert-for-big-island/>

15) "Here's how power outages can have repercussions for Hawai'i's water supply Hawai'i Public Radio | By Savannah Harriman-Pote Published February 13, 2024 at 10:59 AM HST

Water departments on O'ahu and Hawai'i Island have advised customers to conserve water ahead of possible storm-related power outages this month.

But what does the power grid have to do with the water supply?

It is impossible to separate Hawai'i's power system from its water system, said Kawika Uyehara, deputy director of Hawai'i County's Department of Water Supply. " <https://www.hawaiipublicradio.org/local-news/2024-02-13/residents-on-hawaii-island-and-oahu-are-asked-to-conserve-water-amid-power-outages>

16) U.S. Hawaii is "on the verge of a greater catastrophe," locals say, as water crisis continues  
By Li Cohen

Updated on: April 11, 2024 / 8:23 AM EDT / CBS News

In Hawaii, one of the most important sayings is *ola i ka wai*, "water is life" — a phrase that not only sums up what it means to exist on an island, but what it means to live, period. But now, one of the largest of the island chain's land masses is facing a triple threat to its sole freshwater source, and if it isn't addressed soon, one community member says, "we're in deep trouble."

<https://www.cbsnews.com/news/hawaii-water-crisis-climate-change/>

17) NewsHawai'i County issues mandatory 25% water restriction for North Kona  
August 7, 2023 · 5:21 PM HS

A mandatory 25% water restriction has been issued for various communities in North Kona due to the failure of the Honokōhau Deepwell over the weekend.

<https://bigislandnow.com/2023/08/07/hawaii-county-issues-mandatory-25-water-restriction-for-north-kona/>

18) Hawai'i Water Supply Closely Monitored As Severe Drought Continues

by Big Island Video News  
on Nov 6, 2023 at 3:28 pm

(BIVN) – With an ongoing drought on the island of Hawai'i, the Hawai'i County Department of Water Supply says it is closely monitoring its 23 public water systems, with a "special focus" placed on the South Kohala Water System.

<https://www.bigislandvideonews.com/2023/11/06/water-supply-closely-monitored-as-hawai%CA%BB-under-severe-drought/>

This is a map of Power Outages on the Big Island. This map wouldn't have been created if Power Outages were not a problem. <https://www.hawaiianelectric.com/safety-and-outages/power-outages/hawaii-island-outage-map>

Please, give Tax Breaks to all homes that provide solar and/or wind turbine to there homes to help with power issues on the island.

20) "Hawaiian Electric is reporting that several large generators on the Big Island are experiencing a range of issues and may lead to the need for rolling outages if supply does not meet demand."

[https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian\\_electric\\_is\\_reporting\\_that\\_several\\_large/?rdt=52660](https://www.reddit.com/r/BigIsland/comments/1bnuar3/hawaiian_electric_is_reporting_that_several_large/?rdt=52660)

21) "NewsHawaiian Electric asking Big Island customers to conserve power due to down generators

March 25, 2024 · 11:49 AM HST

According to the utility company, this is an usual situation as the large generators are experiencing mechanical problems resulting in a reduced output. The largest generator, an independent power producer that sells electricity to Hawaiian Electric, is offline with significant mechanical issues.

The plant generates 60 megawatts or nearly one-third of the typical peak demand of 180 megawatts on the island."

<https://bigislandnow.com/2024/03/25/hawaiian-electric-asking-big-island-customers-to-conserve-power-due-to-down-generators/>

All the articles above show that a resort development will damage Keauhou Bay coral and marine life and, Big Island resources and infrastructure are currently being negatively affected from the development that is on island already, and there are years of new development that have already been approved, before having safe resources and infrastructures for new developments.

With these scientifically proven articles by some of the most professional scientists in the world, they say the a serious population increase, as well as development and resort runoff that happens because of parking lots, and... with all coastal developments, it will be dangerous for Keauhou Bay to be development because it will damage the marine ecosystems in the area.

Please, save Keauhou Bay's marine life and help the island's resources by saying NO to a Bungalow Resort built by Kamehameha Schools because all of these articles prove it would be extremely damaging to the waters at Keauhou Bay.

Thank you,

Sincerely,



Appendix E

# **DEIS Notification Letter**





111 S. King Street June 23, 2024

Suite 170

Honolulu, HI 96813

808.523.5866

www.g70.design

**Subject:** Courtesy Notification for a Planned Publication of a Draft Environmental Impact Statement (DEIS) for the Kamehameha Schools Keauhou Bay Management Plan Keauhou, Hawai'i Island, Hawai'i

Dear Participant:

On behalf of Kamehameha Schools, G70 is notifying you of the availability of the Draft Environmental Impact Statement (EIS) for the Keauhou Bay Management Plan located in Keauhou, Hawai'i Island, Hawai'i.

Pursuant to Chapter 343, Hawai'i Revised Statutes and Hawai'i Administrative Rules, (Environmental Impact Statement Rules), Sections 11-200.1, an EIS is required as the project requires a County Special Management Area Use Permit.

The EIS process is designed to assist agency decision-making by establishing a review that is informed and balanced in its analysis. The process is also intended to increase public participation by integrating a public comment period as well as community meetings with various stakeholders. Accordingly, it is important for this project to undertake a comprehensive consultation approach throughout the EIS process. This notification of a pending Draft EIS is Kamehameha Schools' effort to be inclusive as we commence the review.

The Draft EIS document can be downloaded from the Kamehameha Schools website at this link: [https://www.ksbe.edu/keauhou\\_bay/](https://www.ksbe.edu/keauhou_bay/).

Interested parties are welcome to submit comments to the DEIS within 45 days of the publication date. The 45-day comment period begins on June 23, 2024, and concludes on August 7, 2024. Comments may be submitted online at the Kamehameha Schools project website: [https://www.ksbe.edu/keauhou\\_bay/](https://www.ksbe.edu/keauhou_bay/). Comments may also be mailed to:

Group 70 International, Inc., dba G70  
111 S. King Street, Suite 170  
Honolulu, HI 96813  
Attn: Kawika McKeague, Principal Planner

Thank you for your participation in the environmental review process.

Sincerely,

Group 70 International, Inc., dba G70

Kawika McKeague, AICP  
Principal Planner



Appendix F

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# **FEIS Notification Letter**





111 S. King Street September 4, 2025

Suite 170

Honolulu, HI 96813

808.523.5866

www.g70.design

**Subject:** Courtesy Notification for a Planned Publication of a Final Environmental Impact Statement (FEIS) for the Kamehameha Schools Keauhou Bay Management Plan Keauhou, Hawai'i Island, Hawai'i

Dear Participant:

On behalf of Kamehameha Schools, G70 is providing this courtesy notification of the publication and availability of the Final Environmental Impact Statement (EIS) for the Keauhou Bay Management Plan, located in Keauhou, Hawai'i Island, Hawai'i. The Final EIS was published in *The Environmental Notice* on September 8, 2025.

Pursuant to Chapter 343, Hawai'i Revised Statutes and Hawai'i Administrative Rules, (Environmental Impact Statement Rules), Title 11 Chapter 200.1, an EIS is required as the project requires a County Special Management Area Use Permit and proposes certain uses within the shoreline area. The Final EIS document can be downloaded from the Environmental Review Program's website at this link: <https://planning.hawaii.gov/erp/>.

The Draft EIS was published in *The Environmental Notice* on June 23, 2024, followed by a 45-day public comment period. Substantive comments received during this period informed the development of the Final EIS. Revisions made in the Final EIS are noted in the Ramseyer format. Ramseyer is a technique of drafting by which changes to the document from a previous version are indicated by underscoring added material and highlighting deleted material.

Please see Section 7.0 of the Final EIS for a list of agencies and individuals who provided written comments on the Draft EIS, and the responses provided to substantive comments in Volume II, Appendix C. Comments are grouped by topic headings in accordance with Hawai'i Administrative Rules § 11-200.1-26(b)(1). A complete list of comment letters submitted is provided in Final EIS Volume II. To locate responses to your substantive comments in the Final EIS, please follow these instructions:

- Download the PDF version of the document.
- Once open, use the search function by pressing both the Control (CTRL) and then the letter "F" buttons on your keyboard.
- A separate search box will appear (usually located in the bottom left-hand corner of your screen).
- Type your name into the search bar to navigate to the page(s) where your comments are listed.
- In the FEIS, comments are organized in a table format, with your comment appearing in the left-hand column and the corresponding response in an adjacent column.
- Be sure to review each instance where your name appears to see all the relevant responses.

Kamehameha Schools – Keauhou Bay Management Plan  
Final Environmental Impact Statement  
September 4, 2025  
Page 2 of 2

Thank you for your participation in the environmental review process.

Sincerely,

Group 70 International, Inc., dba G70

A handwritten signature in black ink, appearing to read 'Kawika McKeague', with a long, sweeping flourish extending to the right.

Kawika McKeague, AICP  
Principal Planner

**Appendix G**

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# **Stakeholder Consultation List**



## Appendix G

# Keauhou Bay Management Plan Stakeholder Consultation Meetings

Running Total	Early Consultation & Development of Keauhou Bay Management Plan Concept (2016-2019):		
1	1	July 26, 2016	Daughters of Hawaii (stakeholder group)
2	2	July 26, 2016	Government agencies (County of Hawaii Planning)
3	3	July 26, 2016	Keauhou Canoe Club (stakeholder group)
4	4	July 26, 2016	Commercial Operators(stakeholder group)
5	5	July 26, 2016	Kupuna/Lineal Descendants (stakeholder group)
6	6	July 27, 2016	Recreational users (volleyball, mooring permit holders)
7	7	July 27, 2016	Keauhou Bay Kama'āina residents - Uncle George, Ed Rapoza, Norman Kaimuloa
8	8	July 27, 2016	Sheraton Keauhou
9	9	October 17, 2016	Sheraton Keauhou
10	10	October 17, 2016	Kupuna/Lineal Descendants (stakeholder group)
11	11	October 18, 2016	Daughters of Hawaii (stakeholder group)
12	12	October 18, 2016	Keauhou Canoe Club + Volleyball Club
13	13	October 18, 2016	Commercial Operators/Recreational users/Educational Users
14	14	October 18, 2016	DLNR DOBOR and County of Hawaii Planning Department
15	15	September 24, 2018	County of Hawaii Planning Department
16	16	September 24, 2018	Kupuna/Lineal Descendants (stakeholder group)
17	17	September 25, 2018	Commercial operators/recreation mooring holders/educational stakeholders
18	18	September 25, 2018	Daughters of Hawaii (stakeholder group)

19	19	September 25, 2018	DLNR-DOBOR
20	20	September 25, 2018	Keauhou Canoe Club & Volleyball Club (stakeholder group)
21	21	October 11, 2018	Kupuna/Lineal Descendants (stakeholder group)
22	22	October 19, 2018	Councilmember Dru Kanuha
23	23	January 23, 2019	West Hawaii today newspaper interview
24	24	February 12, 2019	Councilmember Rebecca Villegas
25	25	February 26, 2019	He'eia Bay residents + residents north of the bay
26	26	March 16, 2020	County of Hawaii Planning Department
27	27	March 20, 2020	County of Hawaii Planning Department, Director Michael Yee (site visit)
28	28	June 22, 2020	County of Hawaii Planning Department staffer Ron Whitmore
29	29	July 21, 2020	Norman Kaimuloa
<b>Early Consultation ahead of the EIS Prep Notice (2021-2022):</b>			
30	1	August 31, 2021	DLNR DOBOR
31	2	October 28, 2021	Kupuna/Lineal Descendants (stakeholder group)
32	3	October 29, 2021	Daughters of Hawaii (stakeholder group)
33	4	November 8, 2021	Kumu Hula Kaea Lyons and Lily Kahelelani Alohikea-Smith (Hālau Ka'eaikahelelani)
34	5	November 22, 2021	Commercial Operators (stakeholder group)
35	6	November 22, 2021	Keauhou Canoe Club (stakeholder group)
36	7	November 22, 2021	Recreational and Educational users (stakeholder group)
37	8	December 2, 2021	Councilmember Villegas
38	9	December 6, 2021	County of Hawaii Planning Department
39	10	December 7, 2021	Ross Wilson, community member and Current Events
40	11	December 20, 2021	Rep. Jeanne Kapela & Sen. Dru Kanuha
41	12	December 14, 2021	Bobby Command, County of Hawai'i Mayor's Office

42	13		Outrigger Hotels (emily attended meeting on O'ahu)
43	14	January 5, 2022	He'eia Bay Residents
44	15	February 15, 2022	Kona-Kohala Chamber of Commerce
45	16	April 1, 2022	Hawaii Leeward Planning Conference (HLPC), General Membership
46	17	<b>April 11, 2022</b>	<b>EISPN Public Scoping meeting</b>
<b>Additional Consultation after the EISPN Scoping Meeting (2022-Present):</b>			
47	1	April 18, 2022	Aunty Cindi Punihaole (Kohala Center)
48	2	April 18, 2022	Hawaii Public Radio Interview
49	3	May 4, 2022	Civil Beat interview
50	4	May 12, 2022	Daughters of Hawaii
51	5	May 25, 2022	Pacific Business News interview
52	6	June 27, 2022	Aunty Barbara Nobriga and Manu Powers (Daughters of Hawaii)
53	7	July 20, 2022	Dave Smith (Keauhou Volleyball Club)
54	8	August 9, 2022	Mayor Roth
55	9	August 25, 2022	Norman Kaimulua (Resident of Keauhou Bay)
56	10	August 25, 2022	Rebecca Melendez and Sally Renkin (interested community members)
57	11	August 30, 2022	Lamaku Mikahala Roy (Kahunanui of Ahu'ena Heiau)
58	12	September 22, 2022	Janet Brinkman (interested community member)
59	13	September 27, 2022	KITV news interview
60	14	October 3, 2022	Pauline Sheldon (subject matter expert on regenerative tourism)
61	15	October 7, 2022	DLNR - Na Ala Hele and NPS Ala Kahakai
62	16	November 7, 2022	Leiola Augustine and Kaleiolani Pasciuta (lineal descendants)
63	17	December 14, 2022	John Defries (Hawaii Tourism Authority) and Representative Kirstin Kahaloa
64	18	December 21, 2022	Uluhao o Hualalai

65	19	January 4, 2023	Na Pe‘a/Nakoa Foundation
66	20	January 17, 2023	Huliauapa‘a and Kahalu‘u Kuahewa
67	21	January 18, 2023	Punana Leo o Kona and Ehunui Kaimalino
68	22	January 26, 2023	La‘iopua 2020
69	23	January 30, 2023	Friends of the Future
70	24	February 28, 2023	Daughters of Hawaii
71	25	April 10, 2023	County meeting regarding Open Space Purchase at Keauhou Bay
72	26	July 10, 2023	Frecia Cevallos, County of Hawaii Deputy Director of R&D
73	27	July 13, 2023	Regenerative Tourism Focus Group
74	28	September 9, 2023	Daughters of Hawaii
75	29	October 18, 2023	West Hawaii Board of Realtors
76	30	April 26, 2024	Hawaii Business Magazine article for public consumption in June 2024 issue
77	31	May 15, 2024	Bobby Command, County of Hawaii Mayor’s office
78	32	May 15, 2024	Daughters of Hawaii (stakeholder group)
79	33	May 15, 2024	Kumu Lily Kahelelani Alohikea-Smith; Hālau Ka‘eaikahelani
80	34	May 15, 2024	Kupuna/Lineal Descendants (stakeholder group)
81	35	May 16, 2024	Commercial Operators (stakeholder group)
82	36	May 16, 2024	Dave Smith (Keauhou Volleyball Club)
83	37	May 16, 2024	Keauhou Canoe Club (stakeholder group)
84	38	May 23, 2024	Councilmember Galimba
85	39	May 28, 2024	County of Hawaii, Planning Department SMA planners
86	40	May 29, 2024	Senator Dru Kanuha
87	41	May 29, 2024	Councilmember Holeka Inaba
88	42	June 6, 2024	DLNR-DOBOR
89	43	June 10, 2024	Adventures in Paradise/Captain Cook Cruises (Geoff Hand)

90	44	June 10, 2024	Chase Alexander - Hawaii Island Ocean Tours (phone call)
91	45	June 20, 2024	Rebecca Melendez (tour of project site)
92	46	June 24, 2024	Tribune Herald Interview
93	47	June 25, 2024	Councilmember Villegas (together with Keauhou Volleyball Club)
94	48	June 25, 2024	Kimberly Gay and Dave Smith (Keauhou Volleyball Association)
95	49	June 26, 2024	CNHA - Kilohana Division (Tourism; Tyler Gomes)
96	50	June 26, 2024	Rep. Lowen
97	51	July 16, 2024	Kona-Kohala Chamber of Commerce - Economic Development Committee
98	52	July 16, 2024	Paula Dobbyn - Civil Beat
99	53	July 18, 2024	Kyle Chock (union advice)
100	54	July 19, 2024	Russell Subiono - Hawaii Public Radio; The Conversation
101	55	July 23, 2024	Daughters of Hawaii (Exec. Dir Renaud, Regent Powers, Board Member Kehau Keanaaina)
102	56	August 1, 2024	KS Hawaii Island staff
103	57	August 1, 2024	Royal Order of Kamehameha
104	58	August 2, 2024	Big Island Now
105	59	August 7, 2024	County of Hawaii, Planning Department SMA planners
106	60	August 27, 2024	Pacific Business News interview
107	61	September 9, 2024	KS Alumni Association - West Hawaii Chapter board
108	62	September 10, 2024	Lamaku Mikahala Roy (Kahu of Ahu'ena Heiau)
109	63	September 19, 2024	Council for Native Hawaiian Advancement Convention
110	64	September 19, 2024	KHON interview
111	65	September 28, 2024	Miss Kona Coffee Community Day + Public Open House

112	66	January 10, 2025	Kahulamū 'Ohana (Noelen/Laura Kahulamū, Daisy Mithcell, Lehua Ochmann, Maka Gallinger)
113	67	February 14, 2025	Rebecca Melendez (met with Kā'eo at Kahaluu Ma Kai)
114	68	March 1, 2025	Ola ka 'i
115	69	March 7, 2025	County of Hawaii: Planning Dir. Darrow, DMD Nishimoto, Deputy Planning Dir. Ahn
116	70	March 15, 2025	Hawaii Council of Hawaiian Civic Clubs - Moku O Keawe Council
117	71	March 22, 2025	Kauikeaouli festival presentation (public presentation)
118	72	March 25, 2025	Noelani Campbell (Keauhou Canoe Club member)
119	73	April 12, 2025	Native Hawaiian Plant Month stewardship activity at Kailiilinehe
120	74	April 15, 2025	Kaulana Nā Pua/Kumu Pelena Keeling's hālau
121	75	April 16, 2025	Men of Pa'a (Iopa Maunakea)
122	76	April 28, 2025	Maka Gallinger, Nolen Kahulamu, Laura Kahulamu, Leilani Kekahuna, Eli Gallinger, Mo and Laka? Walking tour at Keauhou Bay
123	77	April 29, 2025	Emily Natori and Makai Freitas, Hawaii Island staff for Rep. Jill Tokuda