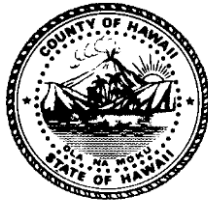


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September 25, 2024

Mary Alice Evans, Director  
State of Hawai'i  
Office of Planning and Sustainable Development  
Environmental Review Program  
235 South Beretania Street, Suite 702  
Honolulu, Hawai'i 96813

Dear Ms. Evans,

**Subject: Final Environmental Assessment (FEA) and Finding of No Significant Impact (FONSI)**  
**Applicant: Lili'uokalani Trust**  
**Project: Makalapua Project District**  
**TMK: (3) 7-4-008:002 (por.), (3) 7-4-010:009-010, (3) 7-4-025:001-003, 005, 015 & 021**  
**Keahuolū, North Kona, Island of Hawai'i**

With this letter, the County of Hawai'i Planning Department (Accepting Authority) hereby transmits the Final Environmental Assessment and Finding of No Significant Impact (FEA-FONSI) for the Makalapua Project District for publication in the next available edition of the Environmental Notice.

The Makalapua Project District proposes the development of a master planned, mixed-use project that will include approximately 600 residential units, 150 hotel rooms, 220,900 square feet of commercial space, a variety of civic and open space features, a roadway network, utilities, and landscaping on approximately 69.5 acres of land.

The Draft Environmental Assessment and Anticipated Finding of No Significant Impact (DEA-AFONSI) was published in the Environmental Review Program's March 8, 2024, issue of the Environmental Notice. The FEA includes copies of comments received and the corresponding responses from the applicant that were received during the public comment period on the DEA-AFONSI.

Based on our review of the FEA and findings from Chapter VII (Significance Criteria



**From:** [webmaster@hawaii.gov](mailto:webmaster@hawaii.gov)  
**To:** [DBEDT OPSD Environmental Review Program](#)  
**Subject:** New online submission for The Environmental Notice  
**Date:** Monday, October 7, 2024 10:36:23 AM

---

**Action Name**

Makalapua Project District

**Type of Document/Determination**

Final environmental assessment and finding of no significant impact (FEA-FONSI)

**HRS §343-5(a) Trigger(s)**

- (1) Propose the use of state or county lands or the use of state or county funds

**Judicial district**

North Kona, Hawai'i

**Tax Map Key(s) (TMK(s))**

(3)7-4-008:002(por.); (3)7-4-010:009; (3)7-4-010:010; (3)7-4-025:001; (3)7-4-025:002; (3)7-4-025:003; (3)7-4-025:005; (3)7-4-025:015; (3)7-4-025:021

**Action type**

Applicant

**Other required permits and approvals**

See Chapter VIII of the Final Environmental Assessment

**Discretionary consent required**

District Boundary Amendment approval, Change of Zone approval, and Special Management Use Permit

**Approving agency**

County of Hawai'i Planning Department

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[Map It](#)

**Applicant**

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**Is there a consultant for this action?**

Yes

**Consultant**

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**Action summary**

Lili'uokalani Trust proposes the development, enhancement, and refinement of approximately 69.5 acres of land in Kailua-Kona on the island of Hawai'i as the Makalapua Project District. The project is aimed at creating a vibrant and sustainable mixed-use community organized around an interconnected street network and will include approximately 600 residential units; 150 hotel rooms; 220,900 square feet of commercial use and a variety of open space features.

A District Boundary Amendment (DBA) application to amend a portion of the project from the State Agricultural District to the State Urban District and a County Change of Zone (Project District) application

will be submitted for the project. The majority of the project area is also within the Special Management Area (SMA) for the County of Hawai'i and as such, a SMA Use Permit application will also be submitted for the project.

#### **Reasons supporting determination**

See Chapter VII (Significance Criteria Assessment) of attached Final Environmental Assessment.

#### **Attached documents (signed agency letter & EA/EIS)**

- [LT-Makalapua-Final-EA-Volume-II-of-III-Part-3.pdf](#)
- [LT-Makalapua-Final-EA-Volume-II-of-III-Part-2.pdf](#)
- [LT-Makalapua-Final-EA-Volume-II-of-III-Part-1.pdf](#)
- [LT-Makalapua-Final-EA-Volume-III-of-III.pdf](#)
- [LT-Makalapua-Final-EA-Volume-I-of-III.pdf](#)
- [2024-09-25-FONSI-FEA.pdf](#)

#### **Shapefile**

- The location map for this Final EA is the same as the location map for the associated Draft EA.

#### **Action location map**

- [MakalapuaProjectDistrict.zip](#)

#### **Authorized individual**

Yukino Uchiyama

#### **Authorization**

- The above named authorized individual hereby certifies that he/she has the authority to make this submission.

# **VOLUME I OF III**

## **Final Environmental Assessment**

### **MAKALAPUA PROJECT DISTRICT**

**(TMK NOS. (3)7-4-008:002 (por.), (3)7-4-010:009 and  
010, (3)7-4-025:001, 002, 003, 005, 015, and 021)**

**Prepared for:**

**Lili'uokalani Trust**

**Approving Agency:**

**County of Hawai'i  
Planning Department**

**October 2024**

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by Munekiyo Hiraga**



**MUNEKIYO HIRAGA**

Planning. Project Management. Sustainable Solutions.

# **Final Environmental Assessment**

## **MAKALAPUA PROJECT DISTRICT**

**(TMK NOS. (3)7-4-008:002 (por.), (3)7-4-010:009 and  
010, (3)7-4-025:001, 002, 003, 005, 015, and 021)**

**Prepared for:**

**Lili'uokalani Trust**

**Approving Agency:**

**County of Hawai'i  
Planning Department**

**October 2024**

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## List of Acronyms

A-5a	Agricultural Zoning District
AIS	Archaeological Inventory Survey
ALISH	Agricultural Lands of Importance to the State of Hawai'i
AM	Morning peak hour
AMP	Archaeological Monitoring Plan
amsl	Above mean sea level
BMPs	Best Management Practices
CARs	Communities at Risk
CDP	Census Designated Place
cfs	cubic feet per second
CIA	Cultural Impact Assessment
CO <sub>2</sub>	Carbon Dioxide
CWPP	Community Wildfire Protection Plan
DBA	District Boundary Amendment
DBEDT	Department of Business and Economic Development
DEM	Department of Environmental Management
DHHL	Department of Hawaiian Home Lands
DLNR	Department of Land and Natural Resources
DOE	Department of Education
DOFAW	Division of Forestry and Wildlife
DOH	Department of Health
DWS	Department of Water Supply
EA	Environmental Assessment
EIS	Environmental Impact Statement
FTE	Full Time Equivalent
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
GET	General Excise Tax
GHG	Greenhouse Gas
gpd	gallons per day
H <sub>2</sub> O	Water Vapor
HAR	Hawai'i Administrative Rules
HCZMP	Hawai'i Coastal Zone Management Program
HELCO	Hawaiian Electric Light Company
HE	Hawaiian Electric
HHSC	Hawai'i Health Systems Corporation
HPD	Hawai'i Police Department
HRS	Hawai'i Revised Statutes
HSP	Hawai'i 2050 Sustainability Plan
HT	Hawaiian Telcom
HWMP	Hawai'i Wildfire Management Organization
IUCN	International Union for the Conservation of Nature
KCDP	Kona Community Development Plan
KLWRA	Keahuolū Lands Water Resources Development Agreement
kV	Kilovolt
kVA	kilovolt Amperes
LID	Low Impact Development
LOS	Level of Service

LSB	Land Study Bureau
LT	Lili'uokalani Trust
LUC	Land Use Commission
LUPAG	Land Use Pattern Allocation Guide
MBC	Makalapua Business Center
MCX	Industrial-Commercial Mixed Zoning District
MG	General Industrial Zoning District
mg	million gallons
mgd	million gallons per day
mph	Miles per hour
MTCO <sub>2e</sub>	Million Metric Tons of Carbon Dioxide Equivalent Per Year
MVA	Mega Volt Amp
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
OPSD	Office of Planning and Sustainable Development
PM	Afternoon peak hour
PM <sub>2.5</sub>	Fine Particulates
ppm	Parts Per Million
PUC	Public Utilities Commission
PUD	Planned Unit Development
rLW	Pāhoehoe lava flows
SHPD	State Historic Preservation Division
SLR-XA	Sea Level Rise Exposure Area
SMA	Special Management Area
SO <sub>2</sub>	Sulfur Dioxide
SOEST	School of Ocean and Earth Science Technology
SPS	Sewage Pump Station
sq. ft.	Square Foot
TAT	Transient Accommodation Tax
TIAR	Traffic Impact Analysis Report
TMK	Tax Map Key
TOD	Transit Oriented Development
UA	Urban Area
USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOG	Volcanic Haze
WE	Saturday mid-day peak hour
WHP	Wildfire Hazard Potential
WHSL	West Hawai'i Sanitary Landfill
WUI	Wildland-Urban Interface
WWTP	Wastewater Treatment Plant

## **Executive Summary**

<b>Project Name:</b>	Makalapua Project District
<b>Type of Document:</b>	Final Environmental Assessment
<b>Legal Authority:</b>	Chapter 343, Hawai'i Revised Statutes Chapter 200.1-11, Hawai'i Administrative Rules
<b>Anticipated Determination:</b>	Finding of No Significant Impact (FONSI)
<b>Applicable Environmental Assessment review "Trigger":</b>	Use of State or County Lands or Funds
<b>Location:</b>	Island of Hawai'i TMK Nos. (3)7-4-008:002 (por.), (3)7-4-010:009 and 010, (3)7-4-025:001, 002, 003, 005, 015, and 021
<b>Landowner:</b>	Lili'uokalani Trust 1100 Alakea Street, Suite 1100 Honolulu, Hawai'i 96813 Contact: Bryan Esmeralda, Manager, Land Planning Phone: (808) 203-6150
<b>Applicant:</b>	Lili'uokalani Trust 1100 Alakea Street, Suite 1100 Honolulu, Hawai'i 96813 Contact: Bryan Esmeralda, Manager, Land Planning Phone: (808) 203-6150
<b>Approving Agency:</b>	County of Hawai'i, Planning Department 101 Pauahi Street, Suite 3 Hilo, Hawai'i 96720 Contact: Zendo Kern, Director Phone: (808) 961-8288
<b>Consultant:</b>	Munekiyo Hiraga 305 High Street, Suite 104 Wailuku, Hawai'i 96793 Contact: Yukino Uchiyama, AICP, Manager Phone: (808) 983-1233
<b>Project Summary:</b>	The Lili'uokalani Trust (LT) proposes the development, enhancement, and refinement of approximately 69.5 acres of land in Kailua-Kona on the island of Hawai'i as

the Makalapua Project District. LT is a nonprofit private operating foundation dedicated to improving the welfare of orphan and other destitute children in Hawai'i with preference given to Native Hawaiians. LT manages its landholdings to provide a financial foundation for the perpetual benefit of its beneficiaries.

The proposed Makalapua Project District will be an infill project and is a transformative development endeavor aimed at creating a vibrant and sustainable mixed-use community that enhances the local landscape while offering a harmonious blend of residential, commercial, and recreational uses. The Project District will be organized around an interconnected, street network where homes, businesses, and entertainment are provided to promote a diverse experience for residents and visitors. The proposed mixed-use project will include approximately 600 residential units; 150 hotel rooms; 220,900 square feet of commercial use and a variety of open space features.

The majority of the project site for the proposed Makalapua Project District is designated "Urban" by the State Land Use Commission (LUC), with the remaining 14.96 acres designated as "Agricultural". The Hawai'i County General Plan's Land Use Pattern Allocation Guide (LUPAG) designates the Project District area as "Industrial" and "Urban Expansion". The lands are classified as "General Industrial" (MG), "Industrial-Commercial Mixed" (MCX), and "Agricultural District" (A-5a) by Hawai'i County Zoning. A District Boundary Amendment (DBA) and County Change of Zone application will be submitted for the project. The majority of the project area is also within the Special Management Area (SMA) for the County of Hawai'i and as such, a SMA Use Permit application will also be submitted for the project.

Implementation of the proposed Makalapua Project District involves improvements and connections to County and State roadways. The use of State or County lands or funds is a trigger for the preparation of an Environmental Assessment (EA) pursuant to Chapter 343, Hawai'i Revised Statutes (HRS) and Section 11-200.1-6, Hawai'i Administrative Rules (HAR). The EA will serve as a technical supporting document for the permit and entitlement process for the proposed project.





# **PROJECT OVERVIEW**



# I. PROJECT OVERVIEW

The Lili'uokalani Trust (LT) is a private operating foundation founded in 1909 by Queen Lili'uokalani, Hawai'i's last reigning monarch. LT's mission is to serve orphan and destitute children, with preference given to Native Hawaiian children. LT serves approximately 12,000 children annually, providing individual casework, counseling, and assistance through direct and group services and indirectly reaches thousands more through a variety of group and community building projects and collaborations with other community partners.

The number of children needing LT's services and support continues to grow. Native Hawaiians lag behind all other major ethnic groups in the areas of health, education, housing, and employment rates. When it comes to Native Hawaiian children, 18.0 percent of school-age children were living in poverty in 2020. Among those living in a single-parent household the number increases to 30.8 percent (U.S. Census Bureau, 2020).

Over the last ten (10) years LT has steadily increased their spending and services to orphan and destitute Native Hawaiian children. These programs and services are supported by revenue derived from LT's real estate holdings and investments. LT does not charge any fees for the services provided to beneficiary children and their families.

Successful planning and development of LT's projects, such as the Makalapua Project District, will provide revenues that will be used to expand the reach of the programs and services offered. The need for these services among Native Hawaiian children continues to grow.

## A. PROJECT LOCATION AND EXISTING USE

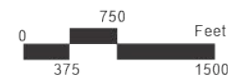
LT proposes the development, enhancement, and refinement of approximately 69.5 acres of land in Kailua-Kona on the island of Hawai'i as the Makalapua Project District. The Makalapua Project District is proposed northwest of Kailua Village and makai of the existing Kona Commons Shopping Center. See **Figure 1**. It is located in the Keahuolū ahupua'a on land owned by LT and identified as Tax Map Key (TMK) Nos. (3)7-4-008:002(por.), (3)7-4-010:009 and 010, and (3)7-4-025:001, 002, 003, 005, 015, and 021. See **Figure 2**.

The Makalapua Project District is located in the corridor that the Kona Community Development Plan (KCDP) designates as a Regional Commercial Center ("Makaeo Village"), and is also immediately adjacent to another Regional Commercial Center, Kailua Village, under the KCDP. The significance of this designation is the intent to organize and intensify new development (both in form and density) to support a mix of uses, commercial centers, pedestrian activity, and transit (i.e., neighborhood circulators and bus rapid transit) when it becomes available. The KCDP directs future growth toward compact



Figure 1

## Makalapua Project District Regional Location Map



Prepared for: Lili'uokalani Trust

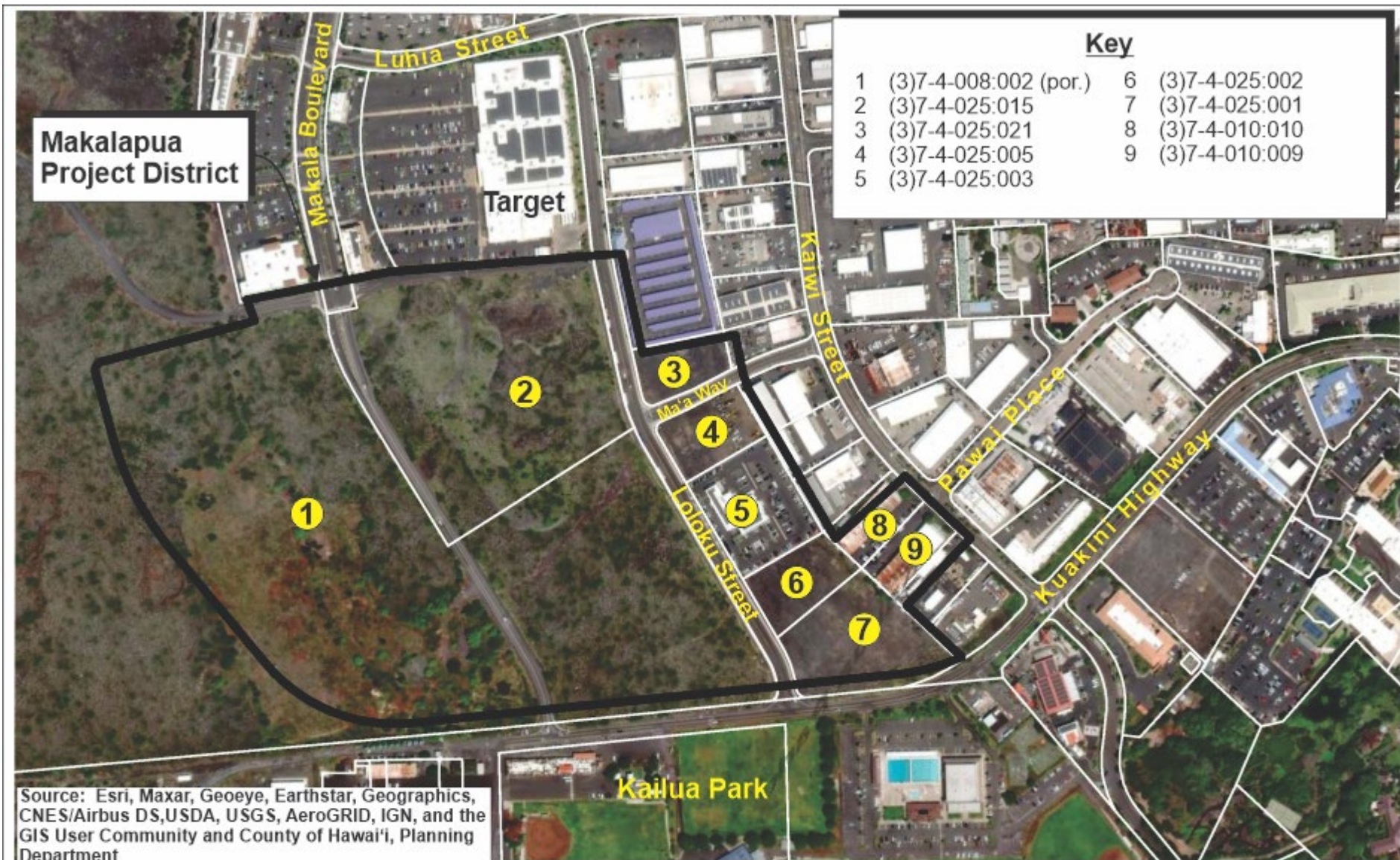


Figure 2

Makalapua Project District  
Parcel Map



Prepared for: Lili'uokalani Trust



QLT/Makalapua PD 1875/Parcel Map DEA

villages to preserve Kona’s rural, diverse, and historical character, while also reducing reliance on automobiles as the only form of transportation.

The Makalapua Project District is bordered by the Kona Commons Shopping Center to the northeast, vacant lands to the north, the existing Kona Industrial Subdivision to the east, and the County’s Kailua Park (also referred to as Old Airport Park) to the south and west. The Makalapua Project District area is currently vacant and undeveloped with the exception of 1) a former recreational sports facility on Makala Boulevard, 2) a BMW car dealership on Loloku Street, 3) temporary storage and staging areas on parcels located along Loloku Street, and 4) light industrial warehouses and businesses on Kaiwi Street.

The majority of the Makalapua Project District is designated “Urban” by the State Land Use Commission (LUC), with the remaining 14.96 acres designated as “Agricultural”. The Hawai’i County General Plan’s Land Use Pattern Allocation Guide (LUPAG) designates the Makalapua Project District area as “Industrial” and “Urban Expansion”. The lands are classified as General Industrial (MG), Industrial-Commercial Mixed (MCX), and Agricultural District (A-5a) by Hawai’i County Zoning.

## **B. LAND OWNERSHIP**

The proposed Makalapua Project District site is owned by LT, a nonprofit public benefit organization dedicated to improving the welfare of orphan and other destitute children in Hawai’i with preference given to Native Hawaiians. LT manages its landholdings in Keahuolū to provide a financial foundation for the perpetual benefit of its beneficiaries.

Queen Lili’uokalani inherited approximately 4,000 acres of land at Keahuolū from her mother, Anale’a Keohokālole. It is with these and other legacy lands that the Queen established LT. In 1909, Queen Lili’uokalani executed a Deed of Trust which established the legal and financial foundation of an institution dedicated to the welfare of orphan Hawaiian children. She amended her Deed of Trust in 1911 to include destitute children. The Deed of Trust states that *“all the property of the Trust Estate, both principal and income...shall be used by the Trustees for the benefit of orphan and other destitute children in the Hawaiian Islands, the preference given to Hawaiian children of pure or part-aboriginal blood”* (The Lili’uokalani Trust, 2016). The proposed Makalapua Project District is intended to create long-term value for the Trust and provide financial support for its programs for future generations.

## **C. PROJECT BACKGROUND**

LT prepared a previous land plan for a portion of its lands in Keahuolū in 1990 (hereafter referred to as the “1990 Land Plan”). The 14.96-acre portion of the Makalapua Project District that is within the State “Agricultural” district was included as part of the petition area in the 1990 Land Plan proceedings before the LUC.

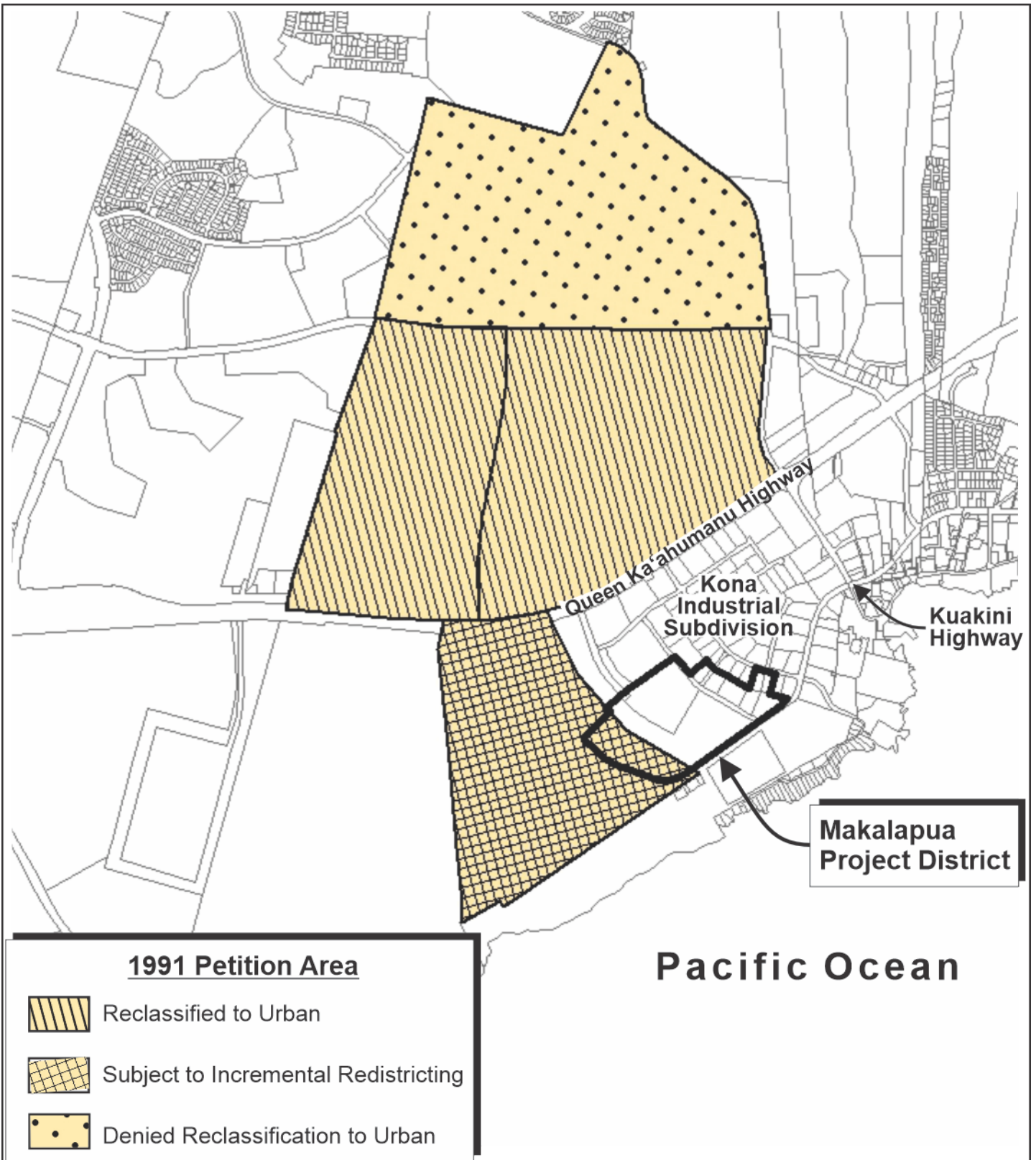
The 1990 Land Plan included centers for urban activity, government, regional shopping, professional practices, a regional-serving hospital, a business park and light industrial area, a business-serving hotel complex, a college campus for West Hawai'i, and a historic preserve area. An Environmental Impact Statement (EIS) was prepared for the 1990 Land Plan and was accepted by the LUC. The LUC granted a District Boundary Amendment (DBA) from "Conservation" and "Agricultural" to "Urban" for the 1990 Land Plan under a phased and incremental redistricting approach in 1991 (Docket No. A89-646, referred to as 1991 LUC Decision and Order). LT's lands between Queen Ka'ahumanu Highway and Ane Keohokālole Highway were reclassified to "Urban" for two (2) phases of development (Phase I and Phase II), while 212 acres (Phase III) of "Agricultural" land, makai of Queen Ka'ahumanu Highway were subject to incremental reclassification upon substantial completion of the first increment. See **Figure 3**.

While LT has substantially commenced development in Phase I, LT was not able to substantially complete development of Phase I and Phase II of the 1990 Land Plan, due to changing market conditions, despite its best efforts. LT has since revised its land plan for Keahuolū to better fit current market demands and other needs of the community. The new land plan provides a broad range of mixed-housing choices that will appeal to different age groups and levels of affordability.

Because Phase I and Phase II of the 1990 Land Plan were not substantially developed, Phase III, which includes 14.96 acres of the western portion of the Makalapua Project District, remained in the "Agricultural" district, subject to incremental reclassification to the "Urban" district under the 1991 LUC Decision and Order. In August 2015, LT submitted a motion to amend the 1991 LUC Decision and Order to remove the Phase III lands from the effect of that order and shift 14.96 acres of Phase III lands into a separate project (i.e., Makalapua Project District development). On March 24, 2016 the LUC granted LT's motion to amend the 1991 LUC Decision and Order by releasing the Phase III lands from its order. See **Appendix "A"**. LT will now be seeking to reclassify the aforementioned 14.96-acre portion of the Phase III lands from the "Agricultural" district to the "Urban" district so that it can be included within the Makalapua Project District development.

The balance of lands remaining in Phase III "Agricultural" land (197.37 acres) will remain in "Agriculture" until such time that LT prepares an updated land plan for these lands, at which time it will submit a request for a DBA from the LUC. The Keahuolū Land Plan is separate from and independent of the proposed Makalapua Project District development.

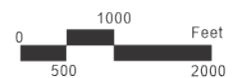
It is noted that LT has been involved in planning efforts for the Makalapua Project District for a number of years and there were previous land use concepts presented and assessed. In particular, an earlier iteration of the Makalapua Project District was developed in 2019 and called for a larger commercial use component and fewer residential units. Since the release of the 2019 plan, however, LT has reassessed its



Source: State Land Use Commission

Figure 3

Makalapua Project District  
1991 District Boundary Amendment



Prepared for: Lili'uokalani Trust

goals for the Makalapua Project District, primarily because of market changes due to the COVID-19 pandemic, and has determined that prioritizing residential uses over commercial uses would better meet the needs of the West Hawai'i community.

#### **D. PROJECT VISION, GOALS, AND OBJECTIVES**

The vision for the Makalapua Project District is to:

*“create a mixed-use, walkable, village center, that is culturally vibrant, economically resilient, and connected to the ‘āina. A place where families can gather, that is grounded by history and prepared for the future”.*

The Makalapua Project District is guided by three (3) core principles:

- Look to the entirety of the ahupua‘a
- Remember we are part of the village of Kailua-Kona
- We do this for our children and our future

The three (3) guiding principles for the Makalapua Project District are supported by Smart Growth Network’s principles, which have been incorporated into the project (Smart Growth, 2023):

- Strengthen and direct development towards existing communities
- Foster distinctive, attractive communities with a strong sense of place
- Mix land uses
- Create walkable neighborhoods
- Create a range of housing opportunities and choices
- Take advantage of compact building design
- Preserve open space, farmland, natural beauty, and critical environmental areas
- Encourage community and stakeholder collaboration in development decisions



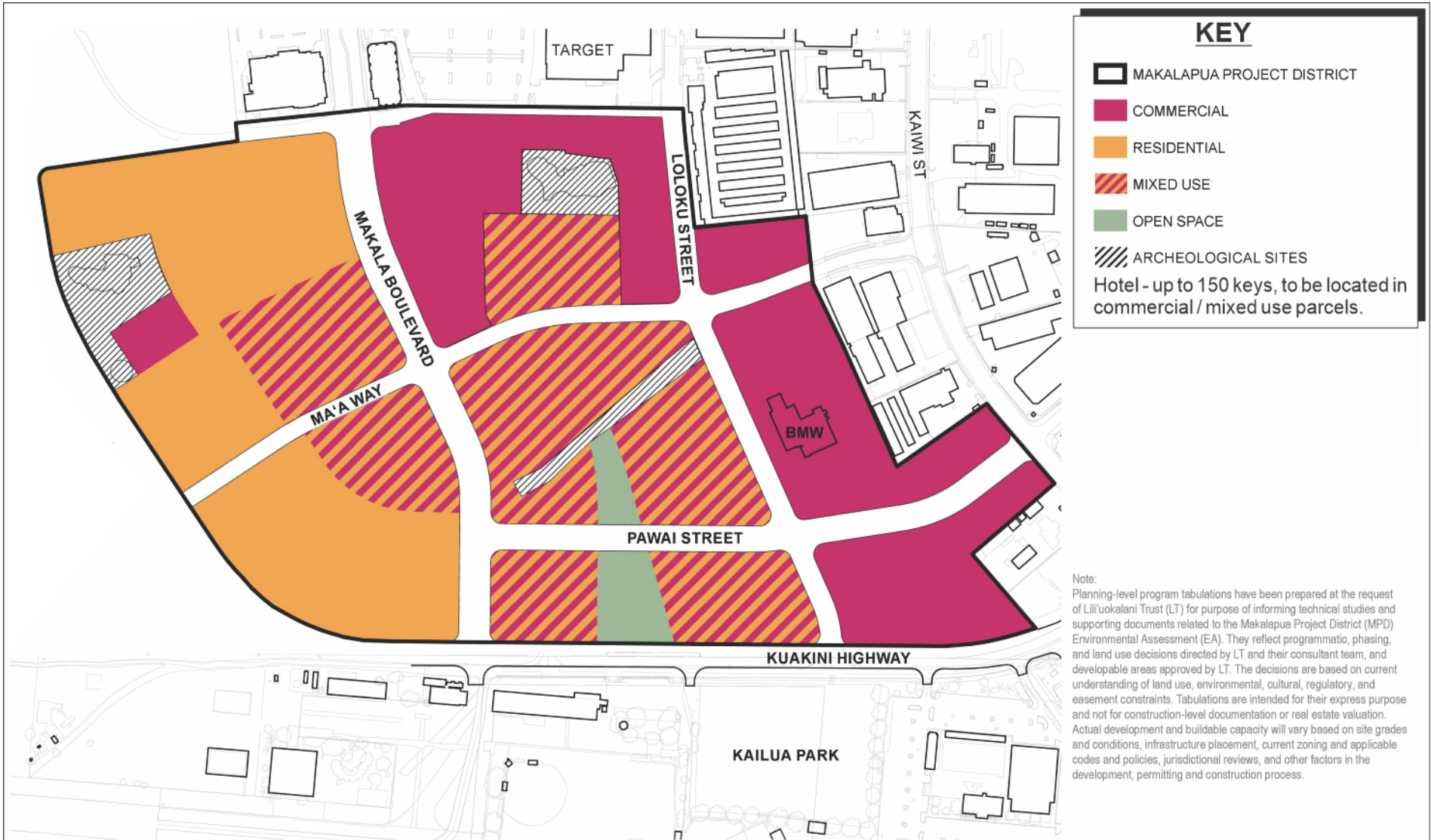
## **E. PROPOSED ACTION**

The Makalapua Project District is a transformative development endeavor aimed at creating a vibrant and sustainable mixed-use community that enhances the local landscape while offering a harmonious blend of residential, commercial, and recreational uses. The Project District will be organized around an interconnected street network where homes, businesses, and open spaces will be provided to promote a diverse experience for residents and visitors. See **Figure 4**. The proposed mixed-use project will include approximately 600 residential units with a mix of single-family and multi-family product types; approximately 220,900 square feet of commercial use which may include grocery, office, retail, civic/community, and food and beverage uses; two (2) hotels providing approximately 150 hotel rooms; and open space features. The project will meet the Kona Village Design Guidelines' open space requirement whereby at least five (5) percent of the project will be open space.

An application will be submitted to change the zoning of the project site to "PD, Project District". In accordance with Hawai'i County Code Section 25-6-40, a project district development is intended to provide quality developments by allowing a flexible, creative planning approach instead of specific land use designations. It also allows for flexibility in locations of specific uses and mixes of structural alternatives. As such, while overall densities are not anticipated to change, specific locations for the proposed uses within the Makalapua Project District may be refined as planning progresses. Potential refinements in the proposed locations of specific uses are not anticipated to affect the overall assessment of impacts and mitigation measures for the Makalapua Project District, given that the total unit count or square footage for each use will not substantially change.

Residential products will be designed to meet the needs of a variety of new and existing households, with the primary objective of creating a rich diversity of residents by providing a wide range of choices. These will include medium- to high-density residential units in single-family and multi-family formats for sale and potentially for rent. Residential products will include affordable housing units in accordance with Section 11-4, Hawai'i County Code, the County's Affordable Housing Requirements.

The Makalapua Project District will feature open space amenities to provide gathering places for residents and visitors of Kailua-Kona. As noted previously, at least five (5) percent of the project area, or approximately 3.5 acres in total, will be open space in accordance with the Kona Village Design Guideline's open space requirement. Approximately 1.6 acres of the total open space acreage, referred to as "Village Green", will be provided in the southwest part of the Makalapua Project District, located perpendicular to Kuakini Highway and Pawai Place, and is envisioned to be the center of social activities in the Makalapua Project District. Refer to **Figure 4**. Preliminarily, the Village Green may include large lawn areas, seating areas, and children's play areas.



**KEY**

- MAKALAPUA PROJECT DISTRICT
- COMMERCIAL
- RESIDENTIAL
- MIXED USE
- OPEN SPACE
- ARCHEOLOGICAL SITES

Hotel - up to 150 keys, to be located in commercial / mixed use parcels.

Note:  
 Planning-level program tabulations have been prepared at the request of Lili'uokalani Trust (LT) for purpose of informing technical studies and supporting documents related to the Makalapua Project District (MPD) Environmental Assessment (EA). They reflect programmatic, phasing, and land use decisions directed by LT and their consultant team, and developable areas approved by LT. The decisions are based on current understanding of land use, environmental, cultural, regulatory, and easement constraints. Tabulations are intended for their express purpose and not for construction-level documentation or real estate valuation. Actual development and buildable capacity will vary based on site grades and conditions, infrastructure placement, current zoning and applicable codes and policies, jurisdictional reviews, and other factors in the development, permitting and construction process.

Source: Mithun

Figure 4

Makalapua Project District  
 Conceptual Site Plan

NOT TO SCALE



Prepared for: Lili'uokalani Trust



QLT/Makalapua PD 1875/Conceptual Site

Various pocket parks and trails, some of which will incorporate known archaeological sites, will also be incorporated throughout the project area.

The Makalapua Project District is designated as a regional center transit-oriented development (TOD) in the KCDP. The Project District is planned to be aligned with TOD and walkable district principles, as a high density and mixed-use center. Organized around an interconnected street network that considers State and County policies and best practice objectives for Complete Streets, the Makalapua Project District will be designed to support multi-modal transit options. The Makalapua Project District's street network may include the realignment of Makala Boulevard below the Kona Commons Shopping Center to align with the Kailua Park's (Old Airport Park) main access, contingent upon discussions with County agencies. Two (2) north-south extensions (Pawai Place and Ma'a Way) are also planned to be developed and improved within the Project District's interconnected street network. Ma'a Way will be continued from the Kona Industrial Subdivision, providing connections through the Project District. Refer to **Figure 4**. Potential offsite improvements include the widening and restriping of portions of Kuakini Highway and Queen Ka'ahumanu Highway and will be considered in conjunction with the Makalapua Project District.

Given the pace of growth in Kona and the need to carefully shape the Makalapua Project District, LT is taking a long-term view towards its realization. The proposed project leverages a combination of undeveloped land and existing uses/users, with the thoughtful incorporation of additional uses/users that are consistent with the overall vision of the Makalapua Project District. Ultimate build-out is anticipated to be completed in approximately ten (10) years.

## **F. PROJECT NEED**

As LT continues to expand its program and service offerings, additional revenue generation to support this expansion is needed. Implementation of this project helps to fulfill this need.

The housing issues on Hawai'i are not limited to population increase creating a lack of supply. From 2010 to 2017, housing stock on Hawai'i was lagging behind demand. One (1) contributing factor was the amount of vacant housing units. Vacant units are those used for seasonal, occasional, or recreational use, or held off the market while a decision is made regarding their status. Regardless, vacant homes are unable to be lived in full-time (SMS, 2019). In 2017, roughly 9.9 percent of housing units were not part of the housing stock, or "vacant".

Housing units being owned but vacant reduces supply. With reduced supply, homes that are already expensive due to Hawai'i's limited space for development and desirable living conditions become more expensive (SMS, 2019). Furthermore, housing units are being

bought for approximately 87.8 percent more money by out-of-state buyers than what in-state buyers are paying; many of these homes are vacant and used for seasonal, recreational, or occasional use (SMS, 2019). This indicates that in-state buyers are not as financially equipped to compete in the housing market as out-of-state buyers leading to fewer homes available for full-time residents.

The lack of supply has led to an increase of average household size by 7.9 percent on Hawai'i Island, an indicator of pent-up demand (SMS, 2019). Pent-up demand is an indicator that people are ready to buy but are awaiting a better situation, this is supported by a 2019 survey showing only 32.8 percent of Hawai'i County residents preferred to rent (SMS, 2019).

Housing models predict that 13,303 units are necessary for the island by 2025 (SMS, 2019). The Makalapua Project District will help to improve this housing disparity by providing housing units at a variety of price ranges and types in an existing urbanized area. This will increase opportunities for residents to achieve their preferred tenancy type while being able to live near an area of economic and social opportunity.

## **G. CHAPTER 343, HAWAI'I REVISED STATUTES COMPLIANCE**

Implementation of the proposed Makalapua Project District involves improvements and infrastructure connections to State and County roadways, and may also involve use of County funds through the establishment of a Community Facilities District (CFD) or other financing mechanism. The use of State and County lands and funds is a trigger for the preparation of an EA, pursuant to Chapter 343, Hawai'i Revised Statutes (HRS) and Section 11-200.1-6, Hawai'i Administrative Rules (HAR). The EA will serve as a technical supporting document for the permit and entitlement process for the proposed project. Based on coordination between agencies, it has been determined that the County of Hawai'i, Planning Department will serve as the approving agency for the EA.

It is noted that the western portion of the Makalapua Project District was previously assessed in a Chapter 343, HRS EA prepared for the Kona Commons Shopping Center. The Final EA and Finding of No Significant Impact for the Kona Commons project, which included approximately 40 acres of the 69.5-acre Makalapua Project District, were published in the March 23, 2008 Office of Environmental Quality Control Environmental Notice.

The EA for the Kona Commons project assessed three (3) phases of commercial/retail use. The first two (2) phases have been built out with the Kona Commons Shopping Center and Target off of Makala Boulevard. The third phase of Kona Commons assessed in the EA consisted of 40 acres south of Target and Kona Commons Shopping Center. Phase III of Kona Commons has not been developed and remains vacant. These lands are

included in the Makalapua Project District, and include a mixture of uses that were not originally envisioned as part of the 2008 Kona Commons Shopping Center EA.

In addition, the previous iteration of the Makalapua Project District which featured a larger commercial use component and fewer residential units was assessed in a Final EA published in the April 23, 2019 edition of The Environmental Notice. Due to the amount of changes made to the project, LT determined that a new EA is warranted for the current iteration of the project. Since the 2019 Final EA, various technical studies have been updated and incorporated into this EA to reflect the changes to the proposed land use and design.

## **H. LAND USE APPROVALS REQUIRED**

The proposed project will require the following regulatory compliance and approvals:

### **1. Chapter 343, HRS, Environmental Assessment**

As discussed above, use of State and County lands and funds are triggers for a Chapter 343, HRS analysis. State and County lands will be used for roadway improvements. As such, this EA has been prepared in accordance with Chapter 343, HRS and Chapter 200.1-11, HAR.

### **2. State Land Use Commission District Boundary Amendment**

The Makalapua Project District consists of 54.54 acres of land within the State “Urban” district and 14.96 acres in the State “Agricultural” district for a total of 69.5 acres. LT will submit a Petition for a DBA for the 14.96-acre portion of the Project District that is designated as “Agricultural” by the LUC to amend the area to the State “Urban” district. Refer to **Figure 3**. The DBA petition area is less than 15 acres. Therefore, pursuant to Chapter 205, HRS, Section 205-3.1, it will be processed through the County of Hawai‘i reclassification process. The approving body for the DBA petition will be the Hawai‘i County Council.

### **3. County Change of Zone**

The Makalapua Project District currently falls into three (3) main zoning districts: MG, General Industrial; MCX, Industrial-Commercial Mixed; and A-5a, Agricultural District. A Change of Zone application will be submitted by LT to the County of Hawai‘i Planning Department to change the zoning of the project site to “PD, Project District”. As mentioned previously, Hawai‘i County Code Section 25-6-40 notes that a project district development is intended to provide quality developments by allowing a flexible, creative planning approach instead of specific land use designations. It allows for flexibility in locations of specific uses and mixes of structural alternatives. As such, while overall densities are not anticipated to

change, specific locations for the proposed uses within the Makalapua Project District may be refined as planning progresses through the rezoning process. The approving body for the Change of Zone application is the Hawai'i County Council. As outlined in the Kona Community Development Plan, LT will engage in a Design Center Review process prior to filing the Change of Zone application.

#### **4. Special Management Area Use Permit**

The Makalapua Project District falls within the County's Special Management Area (SMA). As such, a SMA Use Permit will be required from the Leeward Planning Commission. It is noted that a SMA Use Permit (SMA 201) was issued in 1983 for an approximately 100-acre area between Queen Ka'ahumanu Highway and Kuakini Highway for the development of an industrial subdivision. SMA 201 was amended in 2005 to allow for industrial-commercial mixed uses permitted by MCX zoning. While portions of the Makalapua Project District are consistent with the MCX zoning approved by SMA 201, a new SMA Use Permit will be sought for the project area to bring consistency with the proposed Project District zoning.

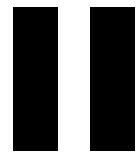
Other permits that may be required for the proposed Makalapua Project District include a National Pollutant Discharge Elimination (NPDES) Permit, Community Noise Permit (as applicable), Subdivision Approval, Construction Approvals (Grading/Building Permits), a Right to Perform Work Within a County Right of Way, and State Department of Transportation Permits (i.e. Permit to Perform Work Upon State Highways).

### **I. PROJECT COST AND IMPLEMENTATION SCHEDULE**

The project will have an anticipated development timeframe of approximately ten (10) years. The total estimated infrastructure construction costs for the proposed project is approximately \$60 million, while building construction is estimated at \$400 million.



**DESCRIPTION OF THE EXISTING  
CONDITIONS, POTENTIAL  
IMPACTS, AND PROPOSED  
MITIGATION MEASURES**



## II. DESCRIPTION OF THE EXISTING CONDITIONS, POTENTIAL IMPACTS, AND PROPOSED MITIGATION MEASURES

### A. PHYSICAL ENVIRONMENT

#### 1. Surrounding Land Uses

##### a. Existing Conditions

The proposed Makalapua Project District is located north of the Kailua-Kona village core. It is bordered by the Kona Commons Shopping Center to the northeast, vacant lands to the north, the existing Kona Industrial Subdivision to the east, and the County's Kailua Park to the south and west. The project area is currently vacant and undeveloped with the exception of 1) a former recreational sports facility on Makala Boulevard, 2) a BMW car dealership on Loloku Street, 3) temporary storage and staging areas on parcels located along Loloku Street, and 4) light industrial warehouses and businesses on Kaiwi Street.

##### b. Potential Impacts and Proposed Mitigation Measures

The proposed Makalapua Project District is located adjacent to and in the immediate vicinity of existing urban development and will complement surrounding land uses. It is located in the corridor that the Kona Community Development Plan (KCDP) designates as a transit-oriented development regional commercial center ("Makaeo Village"), and is also immediately adjacent to Kailua Village, another Regional Commercial Center under the KCDP.

Compatibility and connectivity with surrounding land uses were considered in the planning and design for the Project District. The existing BMW car dealership will be consistent with the uses permitted within the Project District and will be integrated into the proposed new development, while the former recreational sports facility, temporary storage and staging areas along Loloku Street, and light industrial warehouses and businesses on Kaiwi Street will be redeveloped. The internal street network will improve connectivity with the adjacent developed areas and the proposed Project District will complement neighboring areas. As such, significant adverse impacts to surrounding land uses are not anticipated.



## 2. Climate

### a. Existing Conditions

The island of Hawai'i is characterized by a semi-tropical climate containing a multitude of individual microclimates. According to the 2021 County of Hawai'i Data Book, the climate in Kailua is generally mild with an average temperature of about 75 degrees Fahrenheit. The average annual rainfall in the region is approximately 13 inches.

### b. Potential Impacts and Proposed Mitigation Measures

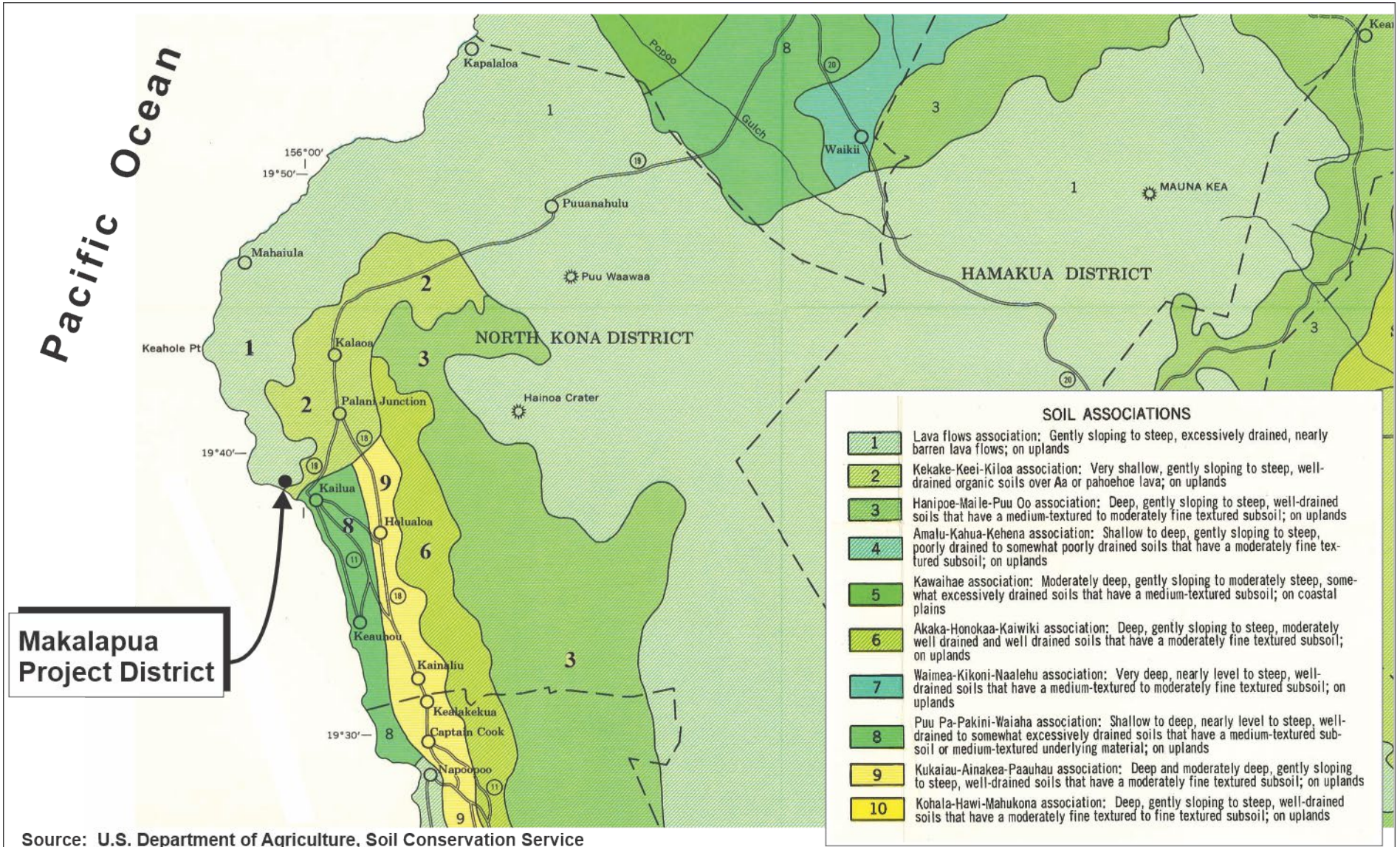
Because the proposed Makalapua Project District consists of new construction, there is significant opportunity to incorporate energy conservation and efficiency measures in the project. Passive energy conservation strategies that are being considered include architectural shading for reducing heat gain, maximizing natural daylighting of interior spaces, building orientation and fenestration for natural ventilation, and landscape strategies to provide summer shade. Open space areas will also be integrated into the Makalapua Project District. It is anticipated that these mitigation measures will serve to offset the potential heat island effect of the residences and related impervious surfaces in the project district. As a result, significant adverse impacts to temperature, precipitation, and wind patterns are not anticipated.

## 3. Topography and Soils

### a. Existing Conditions

The Makalapua Project District ranges in elevation from 10 to 40 feet above mean sea level (amsl). The site generally slopes down in a southwesterly direction toward Kailua Park. Ground slopes range from 0 percent to 12 percent, with an average slope of 3 percent. See **Appendix "B"**.

The majority of the proposed Makalapua Project District is located within the Lava Flows soil association with a small portion of the project area within the Kekake-Keei-Kiloa soil association as designated by the U.S. Department of Agriculture (USDA), Soil Conservation Service in the 1973 Soil Survey of the Island of Hawai'i. See **Figure 5**. The Lava Flows association is characterized by gently sloping to steep, excessively drained, nearly barren lava flows on uplands. Its soils are found on mountains at an elevation ranging from near sea level to 13,000 feet amsl. This association is used for grazing, wildlife habitat, and recreation, though



Source: U.S. Department of Agriculture, Soil Conservation Service

Figure 5

Makalapua Project District  
Soil Association Map

NOT TO SCALE



Prepared for: Lili'uokalani Trust



it should be noted that, in general, the carrying capacity of this soil association for grazing and wildlife is low. The Kekake-Keeki-Kilua association is characterized by very shallow, gently sloping to steep, well-drained organic soils over A'a or Pāhoehoe lava on uplands.

The entire project area is located on Lava flows - Honokohau complex, 2 to 20 percent slopes, as designated by the USDA, Natural Resources Conservation Service. See **Figure 6**. The Honokohau series consists of very shallow, well drained soils. These soils formed in organic material mixed with minor amounts of basic volcanic ash over pahoehoe lava (USDA, National Cooperative Soil Survey, 2012).

**b. Potential Impacts and Proposed Mitigation Measures**

Appropriate Best Management Practices (BMPs) will be implemented during construction to mitigate impacts from soil erosion resulting from wind and water (e.g., use of dust fencing, grading and compaction performed at the optimum moisture content of the soil based on recommendations by the project's geotechnical engineer, and as minimal watering for dust control, as possible).

The proposed project is not anticipated to have significant adverse impacts upon terrestrial conditions.

**4. Agriculture**

**a. Existing Conditions**

In 1977, the State Department of Agriculture developed a classification system to identify Agricultural Lands of Importance to the State of Hawai'i (ALISH). The classification system is based primarily, though not exclusively, upon the soil characteristics of the lands. The three (3) classes of ALISH lands are: "Prime", "Unique", and "Other Important" agricultural land, with all remaining lands designated "Unclassified".

When utilized with modern farming methods, "Prime" agricultural lands have a soil quality, growing season, and moisture supply necessary to produce sustained crop yields economically. "Unique" agricultural lands possess a combination of soil quality, growing season, and moisture supply to produce sustained high yields of a specific crop. "Other Important" agricultural lands include those that have not been rated as "Prime" or "Unique", but are of statewide or local importance for agricultural use. The Makalapua Project District is unclassified under the ALISH system. There

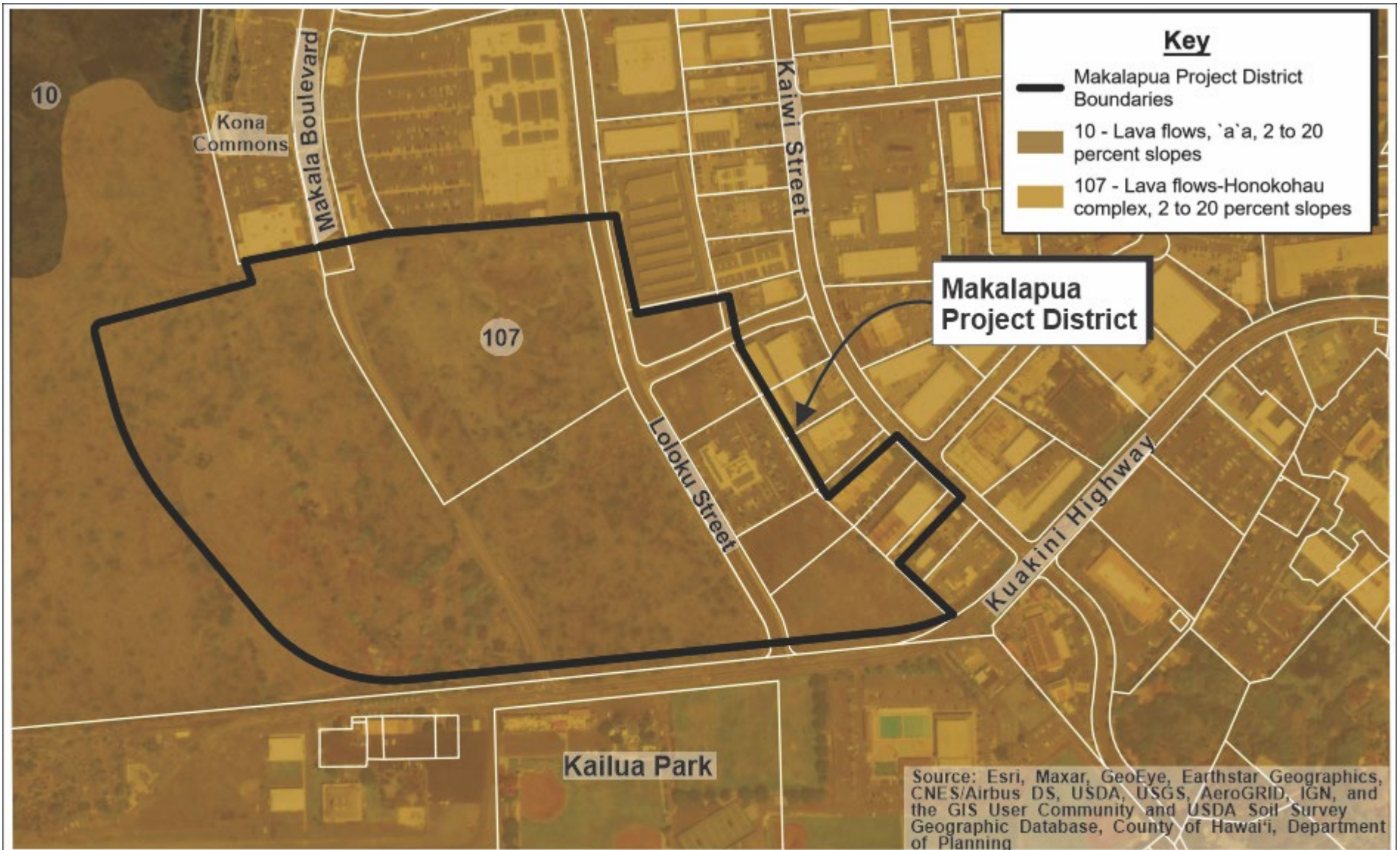


Figure 6

### Makalapua Project District Soil Classification Map



Prepared for: Lili'uokalani Trust

are no “Prime”, “Unique”, or “Other Important” agricultural lands within the immediate vicinity of the project.

The University of Hawai‘i, Land Study Bureau (LSB) developed the Overall Productivity Rating, which classified soils according to five (5) levels, with “A” representing the class of highest productivity soils and “E” representing the lowest. As illustrated in **Figure 7**, the State “Agricultural” District lands within the Makalapua Project District are designated “E” by the LSB, the lowest productivity rating. The remainder of the Project District, which is in the State “Urban” District, is not classified by the LSB.

**b. Potential Impacts and Proposed Mitigation Measures**

Although 14.96 acres of the Makalapua Project District are designated “Agricultural” by the LUC, the land does not have a recent history of agricultural use and is not currently being used for active agricultural cultivation or production. Historic accounts indicate that there was limited cultivation within the coastal region of Keahuolū (Reeve et al., 2016). The State Department of Agriculture does not identify the site or surrounding areas as agricultural lands of importance and the University of Hawai‘i, LSB classifies the State “Agricultural” lands with a low productivity rating. As such, the project area is not considered a suitable location for economically sustainable agricultural uses. Given the foregoing, the proposed Makalapua Project District is not anticipated to present significant adverse impacts to agriculture.

**5. Flood and Tsunami Hazards**

**a. Existing Conditions**

As indicated by the Federal Emergency Management Agency’s Flood Insurance Rate Map (FIRM) for the area, the Makalapua Project District is located within Flood Zone X. See **Figure 8**. Flood Zone X is an area of minimal flood hazard, determined to be outside the 0.2 percent annual chance flood.

The Makalapua Project District is also located outside of the tsunami evacuation area. See **Figure 9**.

**b. Potential Impacts and Proposed Mitigation Measures**

There are no restrictions on development located in areas designated as Flood Zone X. Given that the Makalapua Project District is located within



Figure 7

Makalapua Project District  
Land Study Bureau Overall Productivity Rating



Prepared for: Lili'uokalani Trust

QLT/Makalapua PD 1875/LSB Overall Rating/DEA

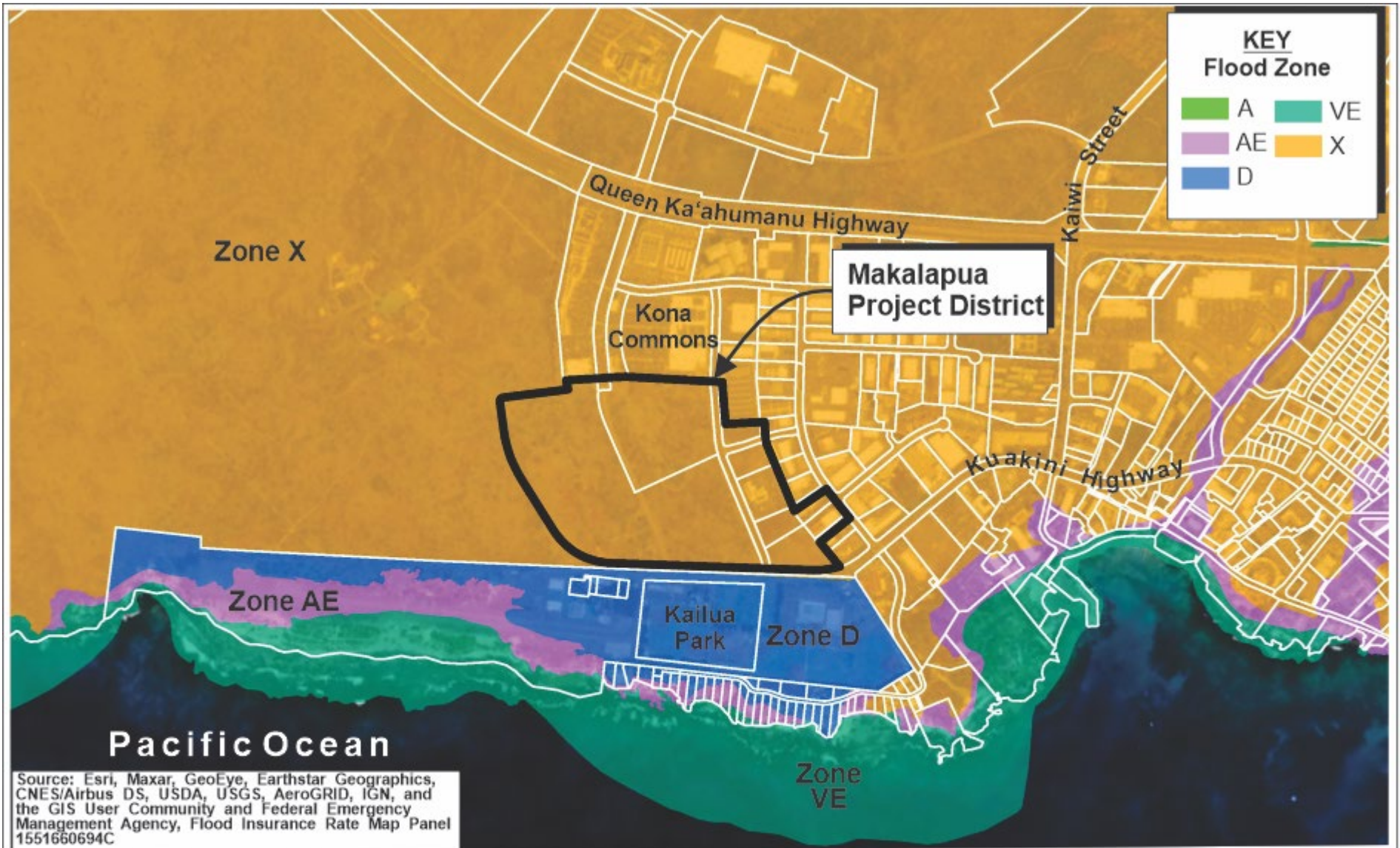


Figure 8

Makalapua Project District  
Flood Insurance Rate Map



Prepared for: Lili'uokalani Trust



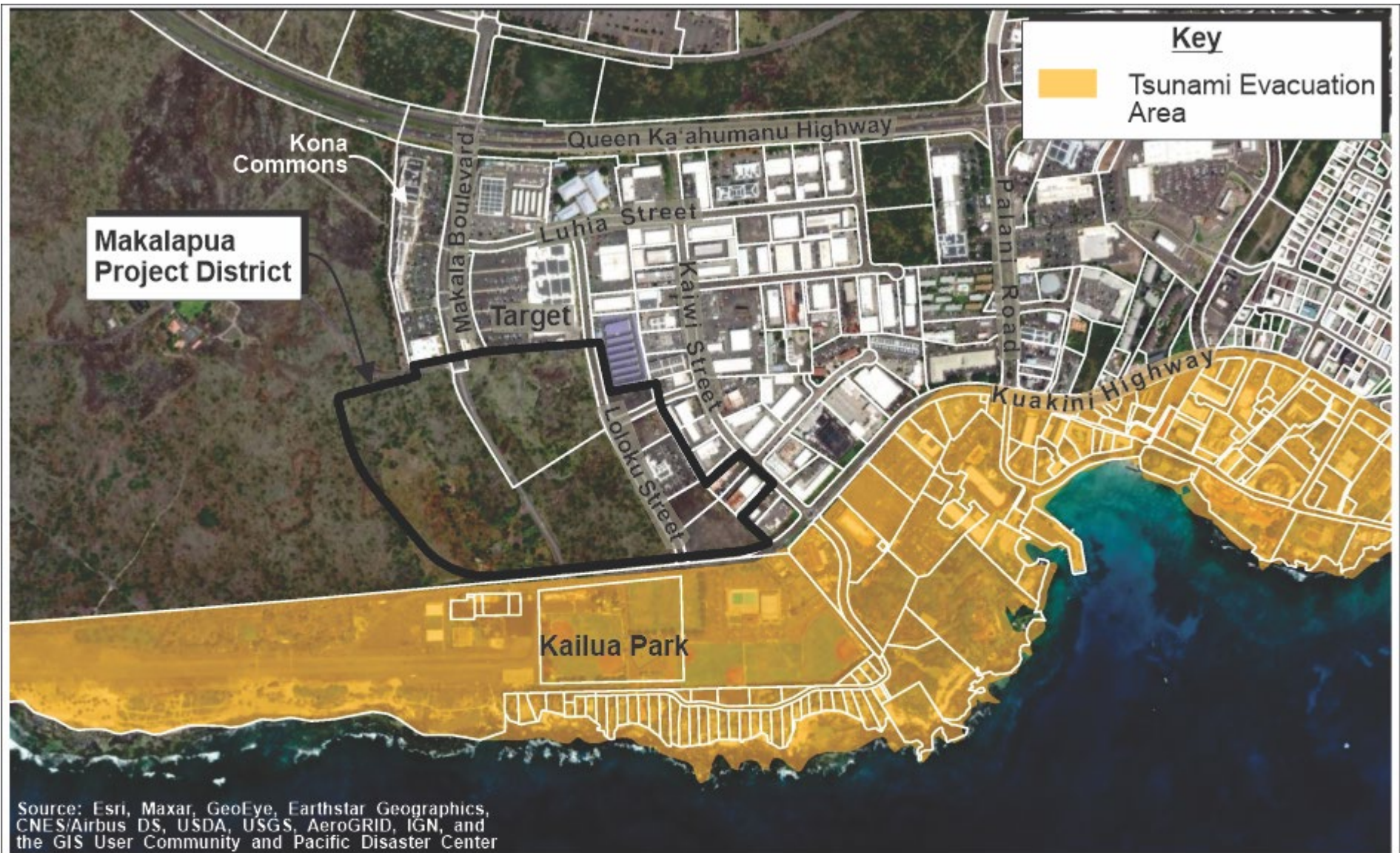


Figure 9

Makalapua Project District  
Tsunami Evacuation Area



Prepared for: Lili'uokalani Trust



Flood Zone X and outside of the tsunami evacuation area, no significant adverse impacts with regards to flood and tsunami hazards are anticipated for the proposed project. It is noted that with the improvements and extensions proposed to the existing Makala Boulevard and Kuakini Highway, as well as new internal roadways within the project, circulation within the area will be improved, which will provide for continued evacuation routes for areas within the tsunami evacuation zone makai of the project site.

## 6. **Earthquake Hazards**

### a. **Existing Conditions**

Thousands of earthquakes occur every year beneath the Island of Hawai'i. Earthquakes in Hawai'i are closely linked to the volcanoes that shaped the island. Numerous small earthquakes usually accompany eruptions and magma movement within Hawai'i's active volcanoes. Other tectonic earthquakes, which are often larger in magnitude, occur in areas of structural weakness at the base of Hawai'i's volcanoes or deep beneath the island (USGS Hawaiian Volcano Observatory, Earthquakes, 2001).

Since 1868, ten (10) destructive earthquakes have hit the County of Hawai'i, including four (4) on the west side of the island. A 6.5 magnitude earthquake with its epicenter in Hualālai in 1921 and a 6.9 magnitude earthquake with its epicenter in Kona in 1951 both caused extensive damage. Most recently, two (2) earthquakes occurred at Kīholo Bay on October 15, 2006, with magnitudes of 6.7 and 6.0, causing more than \$100 million in damages to the northwest area of the island (USGS Hawaiian Volcano Observatory, 2013). The most recent large earthquake on Hawai'i Island was a 6.9 magnitude quake in 2018 originating on Kilauea's southern flank. This quake caused damage to some roads associated with landslides. It also generated a very small tsunami which had no significant impact on the community (USGS, 2018). This quake, as with most quakes of magnitudes above 5.5 are located on the windward side of the island and related to Kilauea volcano.

### b. **Potential Impacts and Proposed Mitigation Measures**

All structures within the proposed Makalapua Project District will be designed and constructed in compliance with the seismic design standards in the County building code, as well as other applicable County, State, and Federal building standards. Additionally, the project site is located away from the Kilauea Volcano.

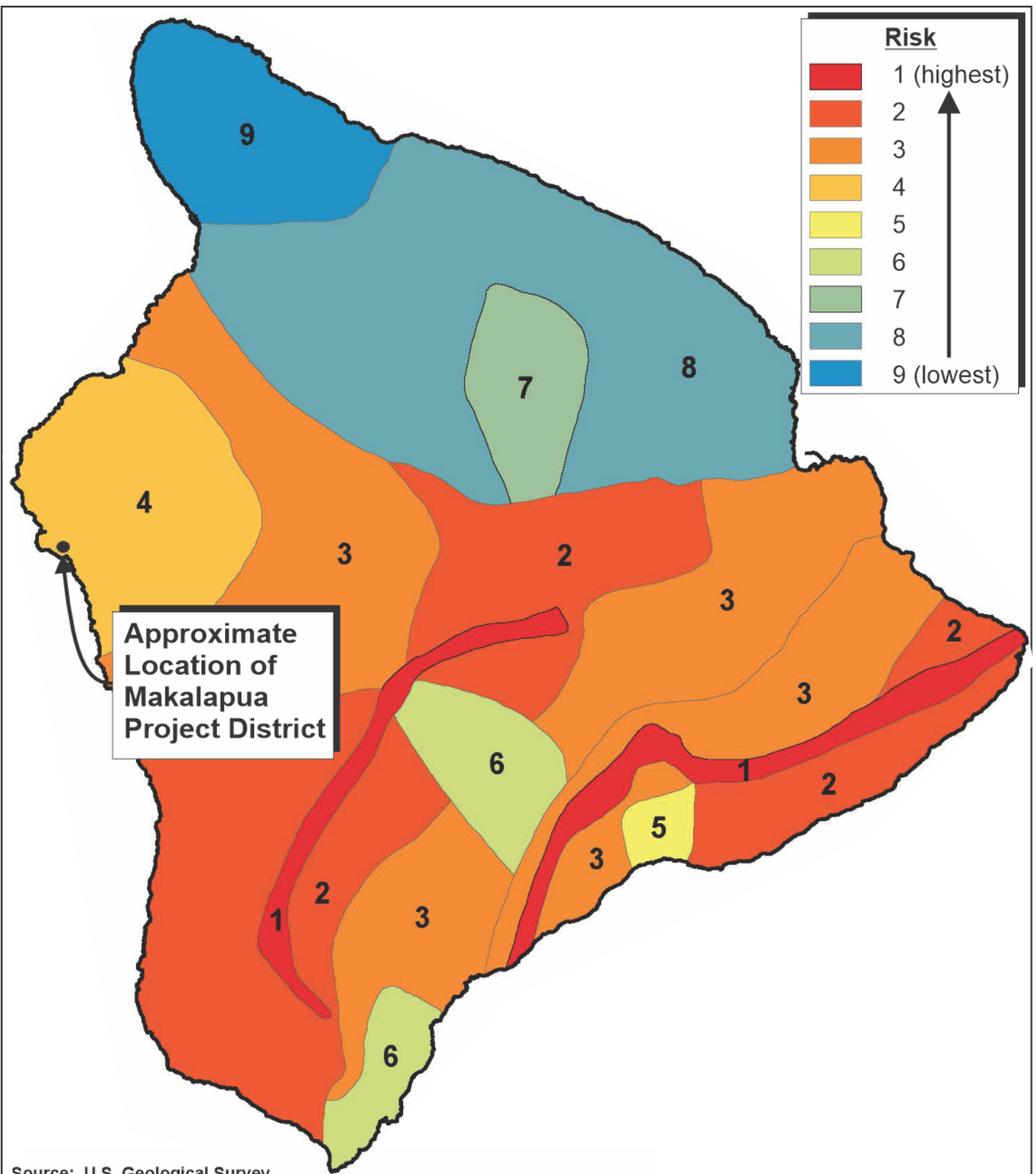
## 7. Volcanic Hazards

### a. Existing Conditions

The proposed Makalapua Project District is located along the western slope of Hualālai, the least active of the island's three (3) active volcanoes. The last eruption at Hualālai occurred in 1801. Earthquake activity beneath the volcano has been low over the past few decades. However, a series of earthquakes occurred over more than a month in 1929, likely caused by magma rising near the surface (USGS Hawaiian Volcano Observatory, Hualālai, 2001).

The U.S. Geological Survey (USGS) published maps showing volcanic hazard zones on the island of Hawai'i. Hazard zones from lava flows are primarily based on the location and frequency of historic and prehistoric eruptions. Although other direct hazards from eruptions, such as tephra fallout and ground cracking and settling, are not specifically considered in the hazard map, those hazards tend to be highest in the areas of the highest hazard from lava flows. The current map, which was revised in 1997, divides the island into zones that are ranked from 1 to 9 based on the probability of coverage by lava flows. Zone 9 represents the lowest volcano hazard while Zone 1 represents the highest. All of Hualālai, including the project area, is located within Zone 4. See **Figure 10**. About 5 percent of lands in this Zone have been covered by lava since 1800 and less than 15 percent have been covered in the last 750 years. Lava flows in this Zone typically cover large areas, but the frequency of eruptions is lower than on Kīlauea and Mauna Loa (USGS, 1997).

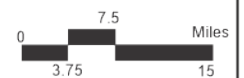
According to a Volcanic Hazards report prepared for Hawaiian Electric Light Company's Keāhole generating station, located approximately six (6) miles north of the project site, the hazard posed by Hualālai varies by location on the volcano. Although a more detailed hazard classification for Hualālai has not been established, such a classification would indicate greater hazards along the volcano's rift zones, and lower hazards with increasing distance down the volcano's flanks (Lockwood and Garcia, 2004). The Makalapua Project District is not located near Hualālai's rift zones.



Source: U.S. Geological Survey

Figure 10

Makalapua Project District  
Volcanic Hazard Map



Prepared for: Lili'uokalani Trust



QLTMakalapua PD 1875\VolcanicHazardMap\DEA

**b. Potential Impacts and Proposed Mitigation Measures**

Future eruptions of Hualālai volcano will likely be preceded by extensive precursory seismic activity (Lockwood and Garcia, 2004). These precursors, combined with the Project District's distance from the summit and rift zones, would allow for appropriate civil defense evacuation procedures. An emergency siren is located at Kailua Park, immediately adjacent to the proposed Makalapua Project District. LT will coordinate civil defense measures, such as the installation of sirens, with the State of Hawai'i Department of Defense, Office of Civil Defense, and the County of Hawai'i Civil Defense Agency, as may be appropriate, to ensure the project is prepared for natural hazards, including volcanic hazards.

**8. Flora and Fauna**

**a. Existing Conditions**

A Flora and Fauna Survey was prepared for the Makalapua Project District by LeGrande Biological Surveys, Inc. in June 2023. See **Appendix "C"**. The undeveloped portion of the Makalapua Project District is largely overrun with non-native grasses, shrubs, and trees. These include the hardy fountain grass (*Cenchrus setaceus*), a non-native species that forms large clumps in lava, kiawe (*Prosopis pallida*), and ironwood (*Casuarina equisetifolia*) trees. A total of 59 plant species were documented, including one (1) endemic, maiapilo (*Capparis sanwichiana*), six (6) indigenous, and one (1) Polynesian introduction. The indigenous species were all rarely or uncommonly observed except the ubiquitous 'uhaloa (*Waltheria indica*) which was abundant throughout the project area. The remaining five (5) indigenous species uncommonly seen were kou (*Cordia subcordata*), naupaka kahakai (*Scaevola taccada*), 'ilima (*Sida fallax*), milo (*Thespesia populnea*), and alahe'e (*Psydrax odorata*). The Polynesian introduced noni (*Morinda citrifolia*) was observed uncommonly scattered throughout the undeveloped area.

A total of 171 individual birds of 17 species, representing 11 separate families was recorded during station counts, but no endangered or threatened avian species were included. Three (3) species, Common Myna (*Acridotheris tristis*), House Finch (*Haemorhous mexicanus*) and Zebra Dove (*Geopelia striata*), accounted for 46 percent of all birds recorded during station counts. The most frequently recorded species was Common Myna, accounting for 22 percent of the total number of individual birds recorded.

Four (4) terrestrial mammalian species were detected during this survey, including dogs (*Canis lupus familiaris*), Asian mongoose (*Herpestes javanicus*), cats (*Felis catus*), and several horses (*Equus caballus*). No 'ōpe'ape'a, the endemic Hawaiian hoary bat (*Lasiurus cinereus semotus*), currently recognized as an endemic species was recorded during the survey.

**b. Potential Impacts and Proposed Mitigation Measures**

The Flora and Fauna Survey found no endangered flora or fauna species within the Makalapua Project District. However, several maiapilo, an endemic plant species, deemed vulnerable by the International Union for the Conservation of Nature (IUCN) were found. Despite the relative lack of fragile biological resources, the survey contains several recommendations to prevent adverse effects to those resources that are present or may be present on a seasonal basis.

First, the Survey recommends that LT incorporate the preservation of maiapilo into the proposed project. This could be accomplished by propagating the bushes onsite or in surrounding undeveloped land. Using maiapilo propagules from plants planned for removal can be reared for outplanting in landscaping or natural areas, benefiting the species longevity and expanding local knowledge of the species. The Survey contains recommended propagation techniques for maiapilo from the University of Hawai'i. Refer to **Appendix "C"**.

Although the Hawaiian hoary bat was not observed during the evening survey of the project area, the bats are frequently recorded in the greater Kona area and could potentially utilize some habitats within the project site during the year. As recommended by the Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW) during early consultation for this Environmental Assessment (EA), trees taller than 15 feet will not be removed during pup rearing season between June 1 and September 15 and barbed wire will not be used for fencing for the proposed project.

Furthermore, although no Hawaiian seabirds were recorded during the survey, it is possible that the endangered Hawaiian Petrel, Band-rumped Storm-Petrel, and the threatened Newell's Shearwater fly over the project area between April and the middle of December each year in small numbers. The primary cause of mortality in Hawaiian Petrels, Newell's Shearwaters, and Band-rumped Storm-Petrels in Hawai'i is thought to be predation by alien mammalian species at the nesting colonies. Collision

with man-made structures is considered the second most significant cause of mortality of these seabird species in Hawai'i. Nocturnally flying seabirds, especially fledglings on their way to sea in the summer and fall, can become disoriented by exterior lighting. Disoriented seabirds may collide with man-made structures and, if not killed outright, become easy targets of opportunity for feral mammals. The Survey recommends, consistent with comments provided by the DNLN DOFAW, that artificial lighting will be minimized and down shielded to avoid and/or minimize impacts to seabirds, and nighttime construction will be avoided during the seabird fledging season between September 15 and December 15.

In addition, the DLNR DOFAW commented that the following State-listed species could potentially occur at or in the vicinity of the project site. The following mitigation measures have been recommended by DLNR DOFAW and will be applied as reasonably possible.

- *State-listed Waterbirds such as ae'ō or Hawaiian stilt, 'alae ke'oke'ō or Hawaiian coot, and nēnē or Hawaiian Goose*

If any of these species are present during construction, all activities within 100 feet (30 meters) should cease and the bird or birds should not be approached. Work may continue after the bird or birds leave the area of their own accord. If a nest is discovered, the DNLN DOFAW will be contacted.

- *The endemic pueo or Hawaiian Short-Eared Owl*

Before any potential vegetative alteration, especially ground-based disturbance, line transect surveys are recommended to be conducted during crepuscular hours through the project area. If a pueo nest is discovered, a minimum buffer distance of 100 meters from the nest should be established until chicks are capable of flight.

- *State listed 'io or Hawaiian Hawk*

It is recommended that pre-construction surveys of the area be conducted by a qualified biologist to ensure no Hawaiian Hawk nests are present, which may occur during the breeding season from March to September. The survey should be conducted at least 10 days prior to the start of construction. If an 'io nest is detected, a buffer zone of 100 meters (330 feet) should be established around it where no construction shall occur until the chick or chicks have fledged, or the nest is abandoned and DOFAW staff should be immediately notified. If adult individuals are detected in the area during construction, all activities within 30 meters (100 feet) of the bird

should cease. Work may continue when the bird has left the area on its own.

- **State listed Blackburn's Sphinx Moth**

Larvae of Blackburn's Sphinx Moth (BSM) feed on many nonnative host plants, including tree tobacco. It is recommended to remove plants less than one (1) meter in height or during the dry season to avoid harm to BSM. If you intend to either remove tree tobacco over one (1) meter in height or to disturb the ground around or within several meters of these plants, they must be thoroughly inspected by a qualified entomologist for the presence of BSM eggs and larvae.

It is also noted that invasive species will not be used in landscaping and native plant species will be incorporated into the landscaping plans for the Makalapua Project District as much as practical. With implementation of the above-noted mitigation measures, no significant adverse impacts on flora and fauna resources are anticipated.

## **9. Streams, Wetlands, and Reservoirs**

### **a. Existing Conditions**

There are no streams or reservoirs within the Makalapua Project District.

The Kailua-Kona Stream is the nearest stream located approximately 0.8 mile east of the Makalapua Project District. This non-perennial stream is not considered an impaired water by the State of Hawai'i, Department of Health.

According to the USFWS, National Wetlands Inventory, there are no wetlands within the project site or immediate vicinity (USFWS, 2015).

It is noted that there are clusters of anchialine ponds along the Keahuolu coastline. Anchialine ponds are land-locked ponds that are fed freshwater from groundwater moving downslope or from rainwater. Ocean water seeps into the ponds through underground crevices in the surrounding lava rock. There was once a series of anchialine ponds within the Kailua Park; however, those ponds were destroyed when the Old Kona Airport was developed (Reeve, et al., 2015). There are no anchialine ponds within the Makalapua Project District.

b. **Potential Impacts and Mitigation Measures**

There are no streams, wetlands, anchialine ponds, or reservoirs within the Makalapua Project District. As such, the proposed Makalapua Project District is not anticipated to present significant adverse impacts on these aquatic resources.

10. **Archaeological and Historical Resources**

a. **Existing Conditions**

The Makalapua Project District is located within the ahupua'a of Keahuolū, which is just north of Kailua Bay on the island of Hawai'i.

Archaeological investigations have revealed that the coastline of Keahuolū was well populated during the pre-Contact period with house sites scattered along the shoreline. Concentrated settlements could be found at Halepa'o Bay and Pawai Bay, as well as along the sandy beach immediately south of Pawai in Maka'eo. This small, historical fishing village in Maka'eo appears to have been the closest settlement to the Makalapua Project District area. Early investigations by John F.G. Stokes indicate that this coastal area was the location of several *heiau* (temples) and *ko'a* (fishing shrines) (Reeve, et al., 2015). Additionally, these investigations note that while settlements may have been close, all agricultural activity within the Makalapua Project District area was of a temporary nature, stating the region was historically unable to support permanent agriculture.

Two (2) archaeological inventory surveys (AIS) were prepared to assess lands within the proposed Makalapua Project District.

1. A Supplemental AIS was conducted over the 110-acre Kona Commons project area, including the majority of the 69.5-acre Makalapua Project District. This AIS was accepted by the DLNR, State Historic Preservation Division (SHPD) in August 2015. This AIS supplemented a previous AIS conducted in 1992 that covered much of the same study area. The Supplemental AIS covered lands makai of Queen Ka'ahumanu Highway between the Kona Industrial Subdivision and LT's "Urban Phase III" lands. This is a 212-acre plot of State Land Use zoned "Agricultural" lands that were previously planned as Phase III of LT's 1990 land plan. See **Appendix "D"** and **Appendix "D-1"**.



2. A separate AIS for LT's Urban Phase III lands was prepared in July 2019. The Urban Phase III AIS covers the 213 acres of LT lands including the 14.96-acre portion of the Makalapua Project District that is designated as "Agricultural" by the State Land Use Commission. This AIS was accepted by SHPD in September 2019. See **Appendix "E"** and **Appendix "E-1"**.

The 2015 Supplemental AIS identified 11 archaeological sites containing 21 component features within the Makalapua Project District. See **Figure 11**. These sites consisted primarily of small and crudely constructed features or modified natural features, including stone mounds, modified depressions, modified overhangs, C-shaped walls and alignments, small enclosures, a historic petroglyph, and a historic trail. The most significant of these sites is a burial lava tube containing human remains (Site 50-10-27-18511, Feature C) that was previously identified in 1992, and the remnants of a historic trail that crosses diagonally through the center of the survey area. The historic trail remnants identified by the survey likely connected the historic Mamalahoa Trail, a mid-19<sup>th</sup> century thoroughfare for this region of Kona, with a shoreline trail.

The Supplemental AIS report notes that the previously identified sites were destroyed by grading, landscaping, and development activities associated with the construction of the Kona Commons Shopping Center, International Marketplace, former sports recreation facility, and related development. Refer to **Appendix "D"**.

The Urban Phase III AIS identified five (5) archaeological sites containing eight (8) component features within the project area, of which two (2) sites (four (4) component features) were recommended for preservation. Refer to **Figure 11**. The sites found during the Urban Phase III survey were similar to those found in the Supplemental AIS, including modified overhangs, C-shaped walls, modified sinks, and an enclosure. Refer to **Appendix "E"**. The first site recommended for preservation, Historic Site No. 50-10-27-13260, consists of a cluster of natural lava sinks that were modified for use as water catchment features. The second, Historic Site No. 50-10-27-13261, is a *"roughly square-shaped stone walled enclosure that possesses an internal terrace and three waterworn boulders that may originally have been set upright as image stones"*. The AIS notes that it appears to have functioned as a small shrine or ceremonial structure. No further work was recommended for the other three (3) sites, Historic Sites No. 50-10-27-29111, No. 50-10-27-29112, and No. 50-10-27-29143.



Figure 11

# Makalapua Project District Archaeological Sites Map

NOT TO SCALE



Prepared for: Lili'uokalani Trust



QLT/Makalapua PD 1875/Arch Sites

The only portion of the proposed Makalapua Project District that has not been covered by an archaeological inventory survey is a block of developed land west of Kaiwi Street. A project specific Chapter 6E-8 Historic Preservation Review request was submitted to SHPD in March 2019. SHPD provided a response dated February 27, 2020, and among other requests, SHPD requested a literature review and field inspection be conducted for areas not previously surveyed within the boundaries of the Makalapua Project District. See **Appendix “F”**. An Archaeological Literature Review and Field Inspection Report was prepared by Pacific Legacy in March 2020. See **Appendix “F-1”**. The literature review indicated that no previous archaeological studies have been conducted in these parcels and the warehouses that occupy the parcels were both built in 1972. The field inspection concluded that as the entire area’s geologic substrate consists of pāhoehoe lava flows with little to no soil accumulation on the surface, it is unlikely that subsurface deposits exist within the inspected area. No further archaeological work is recommended for these parcels. By letter dated June 25, 2020, the SHPD accepted the Archaeological Literature Review and Field Inspection Report. See **Appendix “F-2”**.

**b. Potential Impacts and Proposed Mitigation Measures**

The Supplemental AIS and Urban Phase III AIS reports identified a total of 16 archaeological sites containing 29 component features within the Makalapua Project District.

Each site recorded was assessed for its significance based on broad criteria established for the State and National Register of Historic Places. These criteria are as follows:

**Criterion A:** *Sites that are associated with events that have made a significant contribution to the broad patterns of our history.*

**Criterion B:** *Sites that are associated with the lives of persons significant to our past.*

**Criterion C:** *Sites that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic value or that represent a significant and distinguishable entity, whose components may lack individual construction.*

**Criterion D:** *Sites which have yielded, or may be likely to yield, information important to prehistory or history.*

**Criterion E:** *Sites which have an important value to the native Hawaiian people or to another ethnic group of the State due to associations with traditional cultural practices once carried-out, or still carried-out, at the property or due to associations with traditional beliefs, events, or oral accounts – these associations being important to the groups’ history and cultural identity (State of Hawai’i criterion only).*

### **Significance Assessment of Supplemental AIS**

The significance assessment for the 21 sites identified in the Supplemental AIS is presented in **Table 1**. As shown, the Supplemental AIS recommended further treatment on three (3) of the 21 component features identified. A discussion of the recommended treatment for identified sites, where applicable, follows.

### **Data Recovery for Site 50-10-27-30210, Feature B, Lava Excavation**

Based on the findings of the AIS and consultation with SHPD, a Data Recovery Plan was prepared in accordance with Hawai’i Administrative Rules (HAR) 13-13-278, Rules Governing Standards for Archaeological Data Recovery Studies and Reports, for Site 50-10-27-30210, Feature B lava excavation, to recover a sample of soil that may provide additional information on pollen and phytolith. See **Appendix “G”**. This Data Recovery Plan outlines two (2) scenarios. The first scenario results in findings indicating crop usage in the lava excavation which would indicate use in the pre-Contact period. The second scenario which results in no findings of pollen or phytolith would indicate the lava excavation was not used for agricultural purposes. The Data Recovery Plan was accepted by SHPD on December 20, 2022. See **Appendix “G-1”**. Pacific Legacy, Inc. conducted data recovery investigations in accordance with the approved Data Recovery Plan in May 2023. The site was mapped and LiDAR was used to record the feature. Site 30210, Feature B was hand excavated with a trowel and no cultural material was identified. A soil sample was collected for paleoethnobotanical analysis. An End-of-Fieldwork Letter Report was prepared in May 2023 and submitted to SHPD. See **Appendix “G-2”**. SHPD provided a letter, dated October 5, 2023, accepting the End-of-Fieldwork Letter Report. See **Appendix “G-3”**. A Data Recovery Report providing more detailed information on the data recovery work performed and its findings was prepared and submitted to SHPD in January 2024. See **Appendix “G-4”**. The report is currently under review.

**Burial Treatment Plan for Site 50-10-27-18511, Feature C, Burial Site**

In accordance with HAR 13-13-300, Rules of Practice and Procedure Relating to Burial Sites and Human Remains, a Burial Treatment Plan was prepared for Site 50-10-27-18511, Feature C, which contained a burial site that was discovered in a modified lava tube. See **Appendix “H”**. The Burial Treatment Plan included short-term and permanent protective measures. The short-term protective measures included creating a buffer zone measuring approximately 62.5 meters (ca. 205 feet) in length (northwest to southeast) by 37 meters (ca. 120 feet) in width (northeast to southwest) where no construction will occur. High visibility protective fencing around the burial site will also be installed until more permanent measures are put in place.

**Table 1.** Significance Assessments and Treatment Recommendations of Supplemental AIS Sites within Makalapua Project District

<b>SIHP No.</b>	<b>Feature</b>	<b>Site / Feature Type</b>	<b>Possible Function</b>	<b>Significance (A,B,C,D,E)</b>	<b>Recommended Treatment</b>
50-10-27-18502		Modified Depression	Habitation	D	No Further Work
50-10-27-18508		Walled Overhang	Habitation	D	No Further Work
50-10-27-18509	A	Stone Mound	Agriculture	D	No Further Work
	B	Filled Depression	None		No Further Work
	C	Stone Mound	Agriculture	D	No Further Work
	D	Lava Excavation	Agriculture	D	No Further Work
50-10-27-18511	A	Modified Overhang	Habitation	D	No Further Work
	B	Lava Excavation	Agriculture	D	No Further Work
	C	Modified Lava Tube	Burial	D,E	Preservation
	D	Lava Excavation	Quarry	D	No Further Work
	E	Lava Excavation	Quarry	D	No Further Work
50-10-27-30207		Lava Excavation	Uncertain	D	No Further Work
50-10-27-30208		Stone Mound	Marker	D	No Further Work
50-10-27-30209		Enclosure	Habitation	D	No Further Work
50-10-27-30210	A	Modified Overhang	Storage	D	No Further Work
	B	Lava Excavation	Uncertain	D	Data Recovery
	C	C-shaped Wall	Habitation	D	No Further Work

SIHP No.	Feature	Site / Feature Type	Possible Function	Significance (A,B,C,D,E)	Recommended Treatment
	D	Enclosure	Habitation	D	No Further Work
50-10-27-30211		Petroglyph	Communication	D	No Further Work
50-10-27-30212		C-Shaped Wall	Habitation	D	No Further Work
50-10-27-30287		Trail	Travel	D	Partial Preservation With Interpretation

In addition, the location of the Site 18511 will be accurately plotted on all grading and construction plans and a trained archaeological monitor and a cultural monitor will be onsite during any ground-disturbing activities conducted in the vicinity of the burial. Permanent protective measures include closing the entrances to the lava tubes, the creation of a low stone wall to completely enclose the burial site up to two (2) feet, six (6) inches tall, clearing of the existing invasive vegetation, and an installation of signage to inform the public that the area is a *Wahi Kapu* (sacred site). Finally, access within the buffer wall will be provided to cultural descendants and other individuals and security will monitor the site to ensure any potential threats can be managed. The Burial Treatment Plan was accepted by the SHPD on November 8, 2019. See **Appendix “H-1”**.

**Preservation Plan for Site 50-10-27-30287, Historical Trail**

A Historic Preservation Plan was prepared by Pacific Legacy, Inc. in March 2023 for the historical trail, Site 50-10-27-30287, identified by the 2015 Supplemental AIS, and Sites 50-10-27-13260 and 50-10-27-13261, identified by the Urban Phase III AIS, in accordance with HAR 13-277, Rules Governing Requirements for Archaeological Site Preservation and Development. See **Appendix “I”**. Preparation of this plan involved consultation with recognized cultural descendants of ahupua‘a of Keahuolū. For Site 50-10-27-30287, the Plan updated its previous recommendation and recommended to preserve the entire length of the trail that was documented in January to March, 2022 with agreed-upon sections where the trail is not as discernible that may possibly be breached. Sections that may be breached include a 25-meter section in the western portion of the trail, a 7-meter section in the center, and a 15-meter section at the eastern end of the trail. The buffer zone for the preserved trail will extend three (3) meters out from the outer zone of the trail to a minimum of 6.5 meters. This buffer will serve as the limit for grading in the site. Short-term protective measures during construction, such as protective fencing and archaeological monitoring are also recommended. Long-Term protective measures are also recommended, which included interpretive

signage to share information about the trail top the public, who will be allowed to and encouraged to use the trail in a respectful manner. The 2023 Historic Preservation Plan was accepted by the SHPD on March 6, 2023. See **Appendix “I-1”**.

**Significance Assessment of Urban Phase III AIS**

**Table 2** presents the significance assessments for the sites identified in the Urban Phase III AIS.

**Table 2.** Significance Assessments and Treatment Recommendations of Urban Phase III AIS Sites within Makalapua Project District

SIHP No.	Feature	Site / Feature Type	Possible Function	Significance (A,B,C,D,E)	Recommended Treatment
50-10-27-13260	A	Modified Sink	Water Catchment	C, D	Preservation
	B	Modified Sink	Water Catchment	C, D	Preservation
	C	Modified Sink	Water Catchment	C, D	Preservation
50-10-27-13261		Enclosure	Ceremonial	D, E	Preservation
50-10-27-29111		C-Shaped Wall	Habitation	D	No Further Work
50-10-27-29112		C-Shaped Wall	Habitation/Processing	D	No Further Work
50-10-27-29143	E	Modified Overhang	Storage	D	No Further Work
	F	Modified Overhang	Storage	D	No Further Work

**Preservation Plan for Sites 50-10-27-1320, Modified Sink, and 50-10-27-13261, Ceremonial Structure**

As noted previously, the Urban Phase III AIS recommended preservation for two (2) of the sites, including four (4) component features within the Makalapua Project District. Both sites were identified in a previous Archaeological Inventory Survey completed in 1990. At the time, Site No. 50-10-27-13260, the modified lava sinks, was noted as important for its information content and further data collection was recommended. Site No. 50-10-27-13261, described as a small shrine or ceremonial structure, was also noted as important for its information content, however, no further work was recommended at that time. The data collection on Site No. 50-10-27-13260 was completed in 1993, at which time it was determined that no further work was required. However, the Urban Phase III AIS notes that this site consists of the best examples of the unusual catchment features and it reveals the ingenuity of the area’s local residents in obtaining drinking water in an extremely arid environment.

As recommended by the Urban Phase III AIS, a Historic Preservation Plan was prepared for the two (2) sites. As noted previously, the 2023 Historic Preservation Plan included these two (2) sites. Site No. 50-10-27-13260,

the modified sinks, will be preserved with a buffer zone that will extend to the edges of the natural pu'u, or uplifted pāhoehoe on which the modified sinks are situated. The minimum distance between the preserved feature and the outer edge of the buffer is eight (8) meters. For Site No. 50-10-27-13261, the enclosure will extend to the edges of the natural pu'u, or rise, on which the enclosure is situated. The short- and long-term buffer will be established at a minimum distance of three (3) meters from the outermost edges of the site. The same short-term and long-term protective measures as Site No. 50-10-27-30287 discussed above, such as protective fencing and interpretive signage, are also recommended for these sites. As previously noted, the 2023 Historic Preservation Plan was accepted by the SHPD on March 6, 2023. Refer to **Appendix "I-1"**.

### **Archaeological Monitoring Plan**

Due to the level of ground disturbance and development that has taken place in the project area that was not covered by the Supplemental AIS or the Urban Phase III AIS, it is unlikely to encounter undisturbed soil deposits beneath the existing structures or roads. However, given what has been found within other areas of coastal north Kona, the possibility exists that subsurface lava tubes may run beneath the previously developed area with the potential to contain cultural material or human remains. The locations of such subsurface lava tubes are impossible to predict, making them unlikely to be detected through a program of subsurface archaeological testing. Therefore, LT proposes to undertake archaeological monitoring during construction activities. If a lava tube is discovered during construction, it would be fully investigated to determine if it contains cultural material or human remains.

An Archaeological Monitoring Plan (AMP) has been prepared to implement archaeological monitoring during construction of the entire Makalapua Project District. See **Appendix "J"**. The AMP was submitted to SHPD, and SHPD approved the AMP on February 24, 2023. See **Appendix "J-1"**. In accordance with Section 6E-43.6, Hawai'i Revised Statutes (HRS) and Chapter 13-300, Hawai'i Administrative Rules (HAR), if any significant cultural deposits or human skeletal remains are encountered during ground altering activity conducted as part of the Makalapua Project District, work will stop in the immediate vicinity and SHPD will be contacted to determine the appropriate level of mitigation.

With completion and implementation of the above noted mitigation measures, the project is not anticipated to result in significant adverse impacts to archaeological resources.



## 11. Cultural Resources

### a. Existing Conditions

A Cultural Impact Assessment (CIA) was prepared for the proposed Makalapua Project District by Helen Wong Smith and is summarized herein. See **Appendix “K”**. The CIA included a review of a wide range of written material, such as archaeological reports, government and other historical records, and Hawaiian language sources translated into English, as well as interviews with long-term residents who are familiar with the cultural history and resources of Keahuolū and Lanihau. The CIA was initially written in 2016 but was updated in 2023 with additional interviews and additional analysis to match the project updates reflected in this EA. The CIA was further updated in June 2024 to address comments received during the Draft EA review period.

The Makalapua Project District is located within the Keahuolū ahupua‘a. The portion of Kuakini Highway extending south from the Makalapua Project District is located within the adjacent Lanihau ahupua‘a. Keahuolū and Lanihau are located in the Kona moku (district) on the island of Hawai‘i. The Kona moku is divided into two (2) regions, *Kona kai ‘opua* (“Kona of the distant horizon clouds above the ocean”) and *Kekaha-wai-‘ole* (the waterless place). Keahuolū falls within *Kekaha-wai-‘ole*, which was described as “a dry, sun-baked land.” Sheltered by the abrupt rise of Hualālai, this area receives very little rain below the 1,000-foot elevation contour.

One of the early descriptions of the region was made by Reverends Thurston and Bishop in 1812. The Reverends walked the coastline from Kailua toward Kaiwi Point, crossing the entire coastline of Keahuolū. They described the environs as cultivated to a considerable extent, with small gardens seen among the barren rocks on which the houses were built. Sweet potato, watermelon, and a few tobacco plants were grown in areas where sufficient soil could be found among fragments of lava. About a mile and a half inland, the Reverends observed breadfruit and ‘ōhi‘a trees growing to heights of 20 or 30 feet. This account dispenses the assumption that the region was all barren lava supporting little life.

Ownership of the Keahuolū ahupua‘a was awarded to Anale‘a Keohokālole, mother of King David Kalākaua and Queen Lili‘uokalani, during the Great Māhele in 1848. 15,000 to 20,000 acres of Keohokālole’s Keahuolū lands were included in Land Commission Award 8452. The remaining Keahuolū lands were inherited by her heir, Queen Lili‘uokalani.

Keahuolū and Lanihau are rich in coastal and marine resources, including fishponds and tidal pools that have been noted in the region throughout the years. As recently as the 20<sup>th</sup> century, a small village of ‘opelu (Mackerel scad) fishermen existed at a coconut grove in Keahuolū. Behind the village, known as Makā‘eo, several large brackish water ponds existed, where ‘opae‘ula (shrimp used for catching ‘opelu) thrived. The village and coconut grove were destroyed during the construction of the Old Kona Airport.

Other historic activities in the region include sisal (*Agave sislana*) cultivation in the Keahuolū ahupua‘a and Kealakehe ahupua‘a, to the north. A sisal mill in Keahuolū was owned and operated by Luther S. Aungst from 1917 until its closing in 1924. At the mill, which was surrounded by sisal fields, the sisal was thrashed, dried, and baled before being shipped to San Francisco on steamers.

Along with several heiau along the coast, previous research located several probable permanent residential sites with enclosed yards. Further inland, sites and features are indicative of temporary habitation and of dryland agricultural activities. A substantial increase in rock mounds, particularly faced mounds and modified lava blisters, in upper elevations is consistent with the tradition of increased agricultural activities further inland, where the moisture increases. Permanent populations appear to have been present along the coast, while the midlands were used for temporary habitation and were crossed by trails linking the coast to the uplands, which were used for agricultural cultivation.

The CIA notes that Keahuolū and Lanihau were valued for their marine resources, and, to a limited extent, subsistence crops. Contemporary or continuing cultural practices in Keahuolū and Lanihau include gathering activities of the ocean resources and specific plants makai of the 300-foot elevation contour. However, the CIA notes that there were no Hawaiian cultural resources, beliefs, and practices identified specifically within the Makalapua Project District. Refer to **Appendix “K”**.

**b. Potential Impacts and Proposed Mitigation Measures**

The CIA concluded that the project will have limited impact on Hawaiian cultural resources, beliefs, and practices, as none were identified within the Makalapua Project District. The CIA recommends preservation of endemic plant habitats (i.e., pilo) and continued access for gathering activities. It should be noted, however, that remnants of Hawaiian practices, including agricultural, temporary habitation sites, or additional burial sites, may be discovered during development as they have been identified in other areas

of Keahuolū and Lanihau. Historic uses reveal that Keahuolū and Lanihau were impacted far less by livestock grazing than their northern neighbor, Kealakehe. The absence of grazing activity increases the likelihood of cultural sites to remain intact or to suffer less degradation. For this reason, the CIA recommended cultural monitoring during land-altering activities associated with construction. In the event that archaeological resources are encountered during ground-altering activities, work in the immediate area of the discovery will be halted and the SHPD will be contacted to determine the appropriate level of mitigation. Refer to **Appendix “K”**.

Based on comments received on the Draft EA, the CIA was updated to include an independent section for the project’s Ka Pa’akai Analysis. While the information required for a Ka Pa’akai Analysis was included in the original CIA, the updated CIA provides a more explicit analysis using the Ka Pa’akai framework. The updated CIA, completed by Helen Wong Smith, used additional field work and previously conducted interviews to analyze the three (3) aspects of a Ka Pa’akai Analysis. Refer to **Appendix “K”**. The analysis of the three (3) components of the Ka Pa’akai Analysis is described and analyzed below.

- 1) What are the cultural resources associated with the project area and greater vicinity?

**Analysis:** An assessment of the cultural resources present at the site indicate the cultural significance of water, wahi kupūna, a coconut grove planted by members of the Lui ‘ohana, ocean resources and the gathering space associated with the fresh and saltwater animals and their habitats, plant resources, and Hawaiian oral traditions. These resources are either directly or indirectly associated with the project area. The analysis notes that there are burials present, which will be preserved, but other burials may be present in the area. Cultural monitors will be used to ensure no impacts occur during construction.

- 2) What are the practices reliant on those resources that may get impacted by the proposed project?

**Analysis:** The CIA indicated that the proposed development will impact Hawaiian cultural resources and practices within the project area such as water, other wahi kūpuna, and plant resources associated with cultural practices as well as resources reliant on water both *ma kai* and *ma uka*. The proposed project has the potential to impact additional undocumented burials and wahi kupuna in the project area.

- 3) Will the cultural resources and practices, including Native Hawaiian rights, get impacted? If so, what mitigation is recommended by consultees and professionals to make it pono?

**Analysis:** Mitigation measures have been identified for the project. They include cultural monitors present for any land modifications, greater engagement with Hawaiian community organizations such as the Royal Order of Kamehameha I, an ahupua'a approach to the proposed project to promote opportunities for cultural space and activity, and a community based approach to create opportunities to foster a sense of belonging and kinship. In addition, based on the consultant's experience, the CIA recommends design plans to conserve as much cultural landscape as possible, additional vigilance by cultural monitors for iwi kupuna, archaeological monitoring to avoid impacts to known and potential historic properties, avoiding negative impacts to native plants, and recognizing Hawaiian traditions and customary rights to water. LT will implement the recommended mitigation measures as much as practical.

**12. Beach and Mountain Access**

**a. Existing Conditions**

As previously noted, the Supplemental AIS identified a portion of a historic trail that likely connected the historic Mamalahoa Trail with a shoreline trail. Refer to **Appendix "D"**. No other beach or mountain access is located within the project area.

**b. Potential Impacts and Proposed Mitigation Measures**

As discussed previously, a Historic Preservation Plan was prepared and included the historic Mamalahoa Trail (Site No. 50-10-27-30287) within the project area. The entire length of the trail that was documented in January to March, 2022 with agreed-upon sections where the trail is not as discernible that may possibly be breached will be preserved. See **Appendix "I"** and **Appendix "I-1"**. This historical trail is not a coastal access trail, and as such, the Makalapua Project District will not impact any historic coastal access trails, as no such resources were located within the property.

While the Project District is not adjacent to the shoreline, it will not impede access to the County's Kailua Park. A potential realignment of Makala Boulevard from Ma'a Way to Kuakini Highway is being considered to align

Makala Boulevard with Kailua Park, contingent upon discussions with County agencies.

**13. Air Quality**

**a. Existing Conditions**

Ambient air quality conditions on the island of Hawai'i are unique due to the natural volcanic air pollution that occurs. Volcanic emissions from Kilauea volcano, located on the windward side of the island periodically impact the Kona region. Volcanic emissions, mainly volcanic haze (VOG) a mixture of water vapor (H<sub>2</sub>O), carbon dioxide (CO<sub>2</sub>), and sulfur dioxide (SO<sub>2</sub>) and fine particulates (PM<sub>2.5</sub>) are often released creating a hazy air pollution and impact air quality. This haze is spread across the island, towards Kona, through dominant wind patterns on the island (International Volcanic Health Hazard Network, 2023).

In addition to volcanic air pollution, other potential sources of air pollution include traffic along Queen Ka'ahumanu Highway and other area roadways and the Keāhole Power Plant, located mauka of the Kona International Airport, approximately six (6) miles north of the project site.

The State of Hawai'i, Department of Health maintains an air quality monitoring station in Kailua-Kona, approximately 3.0 miles southeast of the proposed Makalapua Project District in Holualoa. The monitoring station measures PM<sub>2.5</sub>. PM stands for particulate matter and fine particulate matter that can be inhaled into the lungs and can induce adverse health effects. PM<sub>2.5</sub> is defined as particles that are 2.5 microns or less in diameter. Sources of fine particulate matters can include all types of combustion, including motor vehicles, power plants, and some industrial processes. The annual average PM<sub>2.5</sub> level in 2023 was 3.7 micrograms per cubic meter (µg/m<sup>3</sup>). This falls within the State and Federal standards for PM<sub>2.5</sub>, which is 9.0 (µg/m<sup>3</sup>) on an annual basis (State of Hawai'i, Department of Health, 2024).

**b. Potential Impacts and Proposed Mitigation Measures**

During construction associated with the implementation of the proposed Makalapua Project District, there may be short-term impacts to air quality. However, these impacts will be mitigated through the use of Best Management Practices (BMPs) such as the use of dust screens, optimal timing of grading activities based on soil conditions, and sprinkling. Although there may be an increase in vehicular traffic due to the proposed

project, on a long-term basis, significant adverse impacts to air quality are not anticipated as a result of the proposed project.

**14. Greenhouse Gas Emissions**

**a. Existing Conditions**

Greenhouse gases (GHG) (carbon dioxide, methane, nitrous oxide, and fluorinated gases) trap heat in the earth's atmosphere. In the context of climate and ocean warming, increases in levels of atmospheric GHG have been attributed to human activity (EPA, Causes of Climate Change, 2023).

A Greenhouse Gas Emissions Impact Study for the Makalapua Project District was prepared by Terry A. Hayes Associates, Inc. in October 2023. See **Appendix "L"**. The Study indicated that total GHG emissions in Hawai'i in 2019 were 22.01 million metric tons of carbon dioxide equivalent per year (MTCO<sub>2e</sub>). Emissions from the energy sector accounted for the largest portion (88.4 percent) of total emissions in Hawai'i, followed by the agriculture, forestry, and other land use sector (6.0 percent), the industrial processes and product use sector (3.8 percent), and the waste sector (1.9 percent). Total GHG emissions for the State of Hawai'i are projected to be 18.44 million MTCO<sub>2e</sub> /year in 2025, 17.49 million MTCO<sub>2e</sub> /year in 2030, and 13.88 million MTCO<sub>2e</sub> /year in 2045. This trend is largely driven by the projected trend in emissions from energy industries (i.e., electric power plants and petroleum refineries), which are expected to decrease substantially between 2019 and 2045.

As it relates to the Makalapua Project District, the majority of the project area is vacant and there are no major sources producing GHG. As it stands, the majority of the project area is filled with non-native and invasive plant species which pose a fire threat; such a fire could have a high impact on GHG emissions during its burn period.

**b. Potential Impacts and Mitigation Measures**

The Makalapua Project District is a mixed-use community that will offer housing and a variety of commercial uses to residents and visitors in West Hawai'i. The proposed project will generate GHG through construction activities, energy use, and new vehicle trips during the operation phase of the project. In order to estimate the emissions associated with construction of the project, California Emissions Estimator Model (CalEEMod, Version 2022.1.1.19) was used to model maximum emissions of CO<sub>2e</sub> associated with the project. The model shows the maximum annual construction emissions of 1,779 MTCO<sub>2e</sub> per year over the 10-year construction period

and the maximum annual operational emissions of 19,257 MTCO<sub>2</sub>e per year. Refer to **Appendix “L”**.

These numbers are considered to not be significant when compared with the 2025 projections for the State of Hawai‘i of 18.44 million MTCO<sub>2</sub>e. The maximum emissions of CO<sub>2</sub>e during construction is nominal (less than 0.01 percent) compared to the Statewide projection for 2025, and the maximum emissions of CO<sub>2</sub>e during the operational phase of the Makalapua Project District are anticipated to only comprise approximately 0.08 percent of the expected 2025 emissions for the State.

Mitigation efforts such as promoting walkability and multi-modal transportation options, passive energy creation, water conservation, onsite stormwater management, green spaces, and the use of native and drought tolerant plant species, will help reduce GHG emissions and make the Makalapua Project District more sustainable.

Based on the foregoing, the proposed project is not anticipated to result in significant GHG emissions.

## 15. **Climate Change**

### a. **Existing Conditions**

Hawai‘i Act 286: Climate Change Adaptation Priority Guidelines, adopted in July 2012, calls for planning for the impacts of climate change to Hawai‘i’s human and natural systems. Accordingly, the climate change adaptation priority guidelines were established and added to the Hawai‘i State Plan as HRS 226-109. Severe weather events such as drought, sea level rise, wildfire, and flooding are expected to increase as a result of increased GHG emissions worldwide; planning for these impacts and mitigating GHG emissions as much as possible is very important to creating a more sustainable future.

In order to facilitate creation of a more sustainable future, the State of Hawai‘i’s Office of Planning and Sustainable Development (OPSD) prepared, and recently updated, the Hawai‘i 2050 Sustainability Plan to serve as the State’s sustainability and climate strategic action plan; align the State’s goals, policies, and actions with the United Nations Sustainable Development Goals; and recommend sustainability and climate change actions for 2020–2030. The Hawai‘i 2050 Sustainability Plan identifies eight (8) Focus Areas comprised of 38 strategies and over 250 recommended actions to implement between 2020 to 2030.

**b. Proposed Mitigation**

Of the eight (8) Focus Areas identified in the Hawai'i 2050 Sustainability Plan, the following are relevant to the Makalapua Project District:

- i. *Reduce Greenhouse Gas Emissions* – by continuing to monitor the state's emissions and reduce GHG emissions through strategies in the energy, transportation, agriculture and waste sectors.
- ii. *Advance Sustainable Communities* – through strategies that improve land use and access to green space, advance sustainable practices in schools and encourage sustainable buildings and infrastructure.
- iii. *Advance equity* – by ensuring equitable access to resources addressing affordable housing and homelessness crises, and improving gender equity.

More detailed analyses of the Makalapua Project District's applicability goals and strategies outlined in the 2050 Sustainability Plan are included in Chapter III of this Environmental Assessment (EA).

Planning for the Makalapua Project District considers mitigation for potential impacts from climate change through the use of various design techniques. These may include an interconnected street network which promotes multi-modal transportation to reduce vehicle trips, Low Impact Development (LID) techniques, such as permeable paving systems, bio-swales and bio-filtration for stormwater management, various water conservation measures, and design elements to reduce solid waste and divert resources from the landfill for proper recovery. These design techniques will ensure the Makalapua Project District is more sustainable and resilient to potential impacts expected to come as a result of climate change. Furthermore, the Makalapua Project District will incorporate approximately 3.5 acres of open spaces throughout the project area which will improve residents' and visitors' accessibility to green spaces. Lastly, the Makalapua Project District will have a number of housing options from affordable multi-family to single-family homes, allowing for a diverse group of interested people to live within the Makalapua Project District.

Based on the foregoing, the proposed Makalapua Project District will advance the sustainability goals of the State of Hawai'i and is not anticipated to result in significant adverse impacts related to climate change.



**16. Sea Level Rise**

**a. Existing Conditions**

Due to Hawai'i's location in the Pacific, it is often faced with risks due to extreme weather events. Changing climatic patterns caused by global warming result in impacts including rising sea levels, storm surge, increased flood potential, and beach erosion for oceanfront and shoreline parcels. The Hawai'i Sea Level Rise Vulnerability and Adaptation Report was prepared in 2017 by the Hawai'i Climate Change Mitigation and Adaptation Commission and updated in 2022. The sea-level rise exposure mapping in the 2017 Hawai'i Sea Level Rise Report and Hawai'i Sea Level Rise Viewer is based on the upper-end projection in the 2013 Intergovernmental Panel on Climate Change (IPCC) 5th Assessment Report of 3.2 feet of global mean sea level rise by 2100. The Hawai'i Climate Change Mitigation and Adaptation Commission now reports that a 3- to 4-foot rise in sea level by 2100 represents a mid-range, rather than an upper-end, scenario for Hawai'i. Nevertheless, the report authors recommend that the State continue to use the 3.2-foot Sea Level Rise Exposure Area (SLR-XA) available in the Viewer until updated SLR-XA data is available. According to the Hawai'i Climate Change Mitigation and Adoption Commission's mapping tool, the entirety of the Makalapua Project District is located outside (inland of) the projected 3.2-foot SLR-XA. See **Figure 12**.

**b. Proposed Mitigation**

The proposed Makalapua Project District is located inland from the coast, on the mauka side of Kuakini Highway, and at an elevation higher than six (6) feet above mean sea level. Based on its location outside (inland of) the projected 3.2-foot SLR-XA, there are no anticipated significant impacts with regards to sea level rise inundation for the proposed project.

**17. Noise**

**a. Existing Conditions**

Primary background noise generators in the vicinity include Kona Industrial Subdivision, Kona Commons Shopping Center, Kailua Park, and other area roadways and natural sources, such as wind, rain, and the ocean.



Figure 12

Makalapua Project District  
Sea Level Rise Exposure Area Map



Prepared for: Lili'uokalani Trust

**b. Potential Impacts and Mitigation Measures**

Ambient noise conditions will be temporarily impacted by construction activities associated with implementation of the proposed Makalapua Project District. Heavy construction equipment, such as bulldozers, front-end loaders, and material-transport vehicles, will likely be the dominant sources of noise during the construction period. In this context, BMPs will be employed to minimize noise impacts from construction equipment and activity. Further, Community Noise Permits will be obtained from the State of Hawai'i, Department of Health for applicable construction activities.

The Makalapua Project District includes approximately 3.5 acres of open space. This area could be used for music and performing arts concerts, open markets, or other noise-generating functions. The facility will comply with Title 11, Chapter 46, HAR, pertaining to Community Noise Control as may be required.

There are no other significant noise generators associated with the project; therefore, no long-term significant adverse impacts are anticipated as a result of the proposed project.

**18. Scenic and Open Space Resources**

**a. Existing Conditions**

Keahuolū, located on the western slopes of Hualālai, offers beautiful scenic views. Scenic resources in the vicinity include the Pacific Ocean to the southwest and the Hualālai volcano to the east. The steep slopes of Hualālai provide a scenic backdrop when viewed from the coast and offer views of the coastline, Pacific Ocean, and horizon from higher elevations.

While there are no designated natural beauty sites within the Makalapua Project District, other areas within the Keahuolū ahupua'a contain such sites. The Hawai'i County General Plan outlines goals and policies for the protection and preservation of areas of natural beauty, scenic vistas, and viewplanes. Mauka and makai viewplanes along Kuakini Highway and Queen Ka'ahumanu Highway and the white sand beach at Kailua Park, west of the project site, are designated as natural beauty sites by the Hawai'i County General Plan (County of Hawai'i, 2005).

Open space resources in the area are characterized by the vast expanse of undeveloped lands that extend north and west of Kailua-Kona, including

the project site. These undeveloped lands are largely comprised of pāhoehoe lava fields, particularly makai of Queen Ka'ahumanu Highway.

**b. Potential Impacts and Proposed Mitigation Measures**

The proposed Makalapua Project District will utilize largely vacant and undeveloped lands to create a mixed-use community providing for residential, commercial, and public/quasi-public uses. Given the adjacent urban and industrial uses, the use of vacant and underutilized lands for urban purposes is appropriate and will provide a long-term community benefit. The replacement of vacant lands adjacent to urbanized settings does not necessarily hold adverse consequences for scenic and open space resources.

Given the surrounding commercial and industrial uses and the Hawai'i County General Plan's Land Use Pattern Allocation Guide (LUPAG) designation of the project site as "Industrial" and "Urban Expansion", significant adverse impacts to the visual character of the area are not anticipated.

Additionally, LT is committed to developing the project in a manner which will respect the landscape and architectural values of the island. The Makalapua Project District will incorporate open space features throughout the development. At least five (5) percent of the Makalapua Project District, or approximately 3.5 acres in total, will be open space in accordance with the Kona Village Design Guideline's open space requirement. Approximately 1.6 acres of the total open space acreage, referred to as "Village Green", will be provided in the southwest part of the Makalapua Project District, located perpendicular to Kuakini Highway and Pawai Place, and is envisioned to be the center of social activities in the Makalapua Project District. Various pocket parks and trails, some of which incorporate known archaeological sites, will also be incorporated throughout the project area. As such, the proposed project will enhance the open space resources of the region by improving and adding various amenities for the community.

**19. Wildfire Hazards**

**a. Existing Conditions**

Agencies and Organizations such as the DLNR DOFAW and the Hawai'i Wildfire Management Organization (HWMO) have identified wildfires as an increasingly common hazard to communities and native ecosystems. Dry climatic conditions, non-native vegetation, and increased commercial residential development in close proximity to wildland areas all increase

risk for wildfires. The DOFAW's Fire Management Program continues to be at the forefront of wildfire and all other risk-management training throughout the state. DOFAW identifies Communities at Risk (CARs) from wildfires within the Wildland-Urban Interface (WUI) based on vegetation type, climatic regimes and history of wildfires. The Makalapua Project District is within a high-risk community in a WUI as defined by DOFAW.

DOFAW has worked in partnership with the HWMO to address wildfire hazards, mitigation and response efforts. HWMO has worked on developing Community Wildfire Protection Plans across the State. The North Kona Community Wildfire Protection Plan (CWPP), finalized in 2016, encompasses the entire Makalapua Project District. This CWPP include various large-scale maps that visualize large-scale impacts and contributors to fire hazard using a variety of characteristics relating to wildfire management which include natural conditions such as rainfall, vegetation, and wind speeds, and human related factors, such as firefighter response time and locations of developments. In addition, the North Kona CWPP includes recommendations for wildfire mitigation measures, such as ways to harden homes to reduce wildfire-caused ignitions of residential structures, creation of defensible space, and best practices for reducing likelihood of fire. The combination of the CWPP maps and recommendations help to identify potential fire hazards and plan projects in ways that will reduce the risk of impacts to wildfire (Hawai'i Wildfire Management Organization, 2016).

In addition, the USDA and the United States Forest Service (USFS) have created a Wildfire Hazard Potential (WHP) model that shows fire hazard estimates at a smaller (30-meter) scale than CWPP maps. The model is based on the LANDFIRE program which is a fire and fuel characteristics mapping program that identifies potential fire risk (Dillon, Gregory K.; Lazarz, Mitchell T.; Karau, Eva C.; Story, Scott J.; Pohl, Kelly A. 2024). According to this WHP model, the majority of the Makalapua Project District is located in an area classified as having a very low wildfire hazard with some areas without available data. See **Figure 13**.

**b. Potential Impacts and Proposed Mitigation Measures**

The recent and tragic wildfires in Lāhainā, Maui have underscored the destructive ability of wildfire and the importance of wildfire prevention measures. In recognition of North Kona's wildfire risk, hazard mitigation measures to reduce vegetative fuel for wildfires will be implemented. These



Figure 13

Makalapua Project District  
Wildfire Hazard Potential Map



Prepared for: Lili'uokalani Trust

measures may include, but are not limited to, vegetation control, regular trimming of tree canopies, removal of leaf litter, planting of drought-tolerant, fire resistant plants away from power lines, undergrounding of utility lines, and removal of highly flammable materials such as scrap wood, firewood, and combustible furniture. In addition, construction materials and methods may be utilized to reduce wildfire-caused ignitions of residences and structures by hardening the home or structure with noncombustible building materials and ignition-reducing strategies. All applicable fire codes will be complied with.

The predicted fire scenarios from USDA and USFS are likely related to the non-native vegetation that is found in the lava fields which can catch fire and spread easily. The CWPP also outlines the Kailua-Kona region as being a high hazard area relating to untended and undeveloped lands, which contribute to wildfires. Development on the Makalapua Project District will decrease the amount of potentially dangerous, untended, and undeveloped land that are highly susceptible to fire. Elimination of this fuel through the build-out of the Makalapua Project District could lower the likelihood of fire starting and spreading in the area. Eliminating this non-native vegetation is integral in protecting Hawaiian ecosystems, many of which are not adapted to fire.

## **B. SOCIO-ECONOMIC ENVIRONMENT**

### **1. Regional Setting**

#### **a. Existing Conditions**

West Hawai'i has historically been an agricultural area. World-renowned "Kona Coffee" has been and continues to be one of the major commodities cultivated in the region. Coffee thrives in the unique climate and rich volcanic soils on the leeward slopes of Mauna Loa and Hualālai.

During the 1960s, the Kailua-Kona region emerged as a new economic and population center as the visitor industry developed along the Kona coast. Although the first major luxury hotel was located in South Kohala, the North Kona region soon became the most developed site of hotels and resort condominiums on the island. New resort development shifted to South Kohala in the 1980s, but condominium construction continued in Kona. Driven by resort development and the second-home residential market, the Kona region has seen an influx of new residents and experienced tremendous growth. As a result, the population in the Kona region has more

than doubled in between the late 1980s and early 2000s (County of Hawai'i, 2008).

**b. Potential Impacts and Proposed Mitigation Measures**

As previously discussed, the Kona region has experienced continued growth over several decades. The Makalapua Project District is located adjacent to existing industrial and commercial development, just northwest of the Kailua-Kona village core. The location of the proposed project adjacent to an existing urban area will provide for centralized development rather than scattered pockets of urban development. Furthermore, the project will complement existing land uses in the Kailua-Kona area. The variety of residential product types offered within the Makalapua Project District will provide additional opportunities for local residents to reside near places of employment within Kailua-Kona. Additionally, the Makalapua Project District will provide convenient hotel options for visitors traveling to Kona for business and recreation.

**2. Population and Demography**

**a. Existing Conditions**

As discussed previously, the population of Hawai'i County and the Kailua-Kona region has exhibited strong growth over the past decade, particularly compared to the State of Hawai'i as a whole. See **Table 3**. The resident population for the County in 2020 was 200,629, an increase of 8.4 percent since 2010. On the other hand, the Kailua-Kona region, defined as the Kailua Census Designated Place (CDP), was home to 11,975 residents in 2010, and rose by nearly 65 percent to reach 19,713 in 2020 (U.S. Census Bureau, 2020).



**Table 3. Population and Household Trends, 2010 to 2045**

		Historical Data			Estimated Projections			
		2010	2020	% Change 2010-2020	2025	2035	2045	% Change 2020-2045
Population	State of Hawai'i	1,360,301	1,455,271	7.0%	1,514,723	1,592,684	1,648,609	13.3%
	Hawai'i County	185,079	200,629	8.4%	222,396	248,486	273,232	36.2%
	Kailua CDP	11,975	19,713	64.6%	N/A	N/A	N/A	N/A
Households	State of Hawai'i	455,338	478,413	5.1%	N/A	N/A	N/A	N/A
	Hawai'i County	67,096	71,402	6.4%	N/A	N/A	N/A	N/A
	Kailua CDP	4,196	7,506	78.9%	N/A	N/A	N/A	N/A

Source: State of Hawai'i, DBEDT State Databook, 2021, and U.S. Census QuickFacts, 2020.

Population growth in Hawai'i County is expected to continue to outpace statewide growth over the next 20 years. According to population projections prepared by the State Department of Business, Economic Development, and Tourism (DBEDT), Hawai'i County's population is anticipated to reach 248,486 by 2035 and 273,232 by 2045, a 36.2 percent increase over 25 years. During the same time period, statewide population is projected to grow by just 13.3 percent to 1.6 million residents in 2045. Refer to **Table 3**.

**b. Potential Impacts and Mitigation Measures**

The proposed Makalapua Project District will provide needed housing options for the growing population in the Kailua-Kona area. Inasmuch as the proposed project is intended to accommodate projected growth that would occur with or without the development, significant impacts to the West Hawai'i population are not anticipated as a result of the proposed project. Residential products will provide residents with a wide range of housing choices. These will include medium- to high-density residential units in single-family and multi-family formats for sale with the potential opportunity for rentals.

3. **Economy and Labor Force**

a. **Existing Conditions**

Hawai'i County's economy is heavily dependent upon the visitor industry. Hawai'i's economy through 2019 was strong, with record-setting visitor arrivals and low unemployment. The COVID-19 pandemic had far reaching impacts on the economy on Hawai'i island, in the State of Hawai'i, and across the nation. With the end of the pandemic and return of the visitor industry, Hawai'i County's economy has been growing continuously. As of April 2024, the unemployment rate of Hawai'i County was at 2.8 percent while the statewide unemployment rate was 2.5 percent. In April 2024, the seasonally unadjusted unemployment rate in Hawai'i County averaged 2.8 percent, which was the same rate as the statewide unemployment rate (State of Hawai'i Department of Business, Economic Development and Tourism, 2024).

In 2023, there were 69,200 non-agricultural wage and salary jobs in Hawai'i County, of which 14,800, or 21 percent, were in the Leisure and Hospitality Industry. Government jobs on the island also comprised a substantial share of the County's employment base (State of Hawai'i, Department of Labor and Industrial Relations, Job Count by Industry, 2024).

b. **Potential Impacts and Proposed Mitigation Measures**

In the short term, the development of the Makalapua Project District will generate positive economic impacts associated with construction-related spending and employment. The full build-out of the project district is anticipated to take 10 years. From a long-term perspective, the project will provide economic development opportunities through the provision of new hotel, retail, commercial, and office space. The Makalapua Project District will also create opportunities for new businesses to start, while continuing to provide support for existing businesses to remain and flourish as the region grows. Additionally, income generated will benefit LT's programs, which serve orphan and destitute children in Hawai'i.

To quantify the effects described above, an Economic and Fiscal Impact Analysis was conducted for the proposed project. The report estimates how the construction and subsequent operation of the Makalapua Project District will influence the local economy, and measures creation of jobs and associated payroll, economic output, and potential impacts to the State and County General Funds. A summary of the analysis is given below. See **Appendix "M"**.

Economic and fiscal impacts from the Makalapua Project District were analyzed for two (2) phases – for the development period and at full build-out.

### **Development-Related Economic and Fiscal Impacts**

The proposed project is estimated to cost approximately \$457.0 million for construction over a 10-year development period, including onsite and offsite infrastructure and vertical improvements. The total construction cost translates into average construction expenditures of approximately \$45.7 million per year. The project's construction activities are expected to create 117 full time equivalent (FTE) direct construction jobs per year with an annual payroll of \$9.1 million. In addition to construction expenditures, development activities will generate indirect sales associated with supplying goods and services to construction companies and to the families of construction workers. These indirect sales are expected to average about \$36.5 million per year and are estimated to create 180 FTE indirect jobs with an anticipated annual payroll of approximately \$10.0 million.

In terms of fiscal impacts, during the development stage, the State of Hawai'i is estimated to receive additional tax revenues of approximately \$3.9 million per year through General Exercise Tax (GET), Corporate Income Tax, Personal Income Tax, and Conveyance Tax. The County of Hawai'i will also receive additional tax revenues from the GET surcharge of 0.5 percent which is projected to be \$286,100.00 per year. In as much as the State and County are not anticipated to bear any costs associated with the project development, the project will generate a positive fiscal impact for the State and County during the development period.

### **Economic and Fiscal Impacts at Full Build-out**

From a long-term perspective, the project will provide affordable and market-rate housing for residents as well as create new jobs and generate new spending in the local economy. At full build-out, the project will provide approximately 600 housing units, 220,900 square feet (sq.ft.) of commercial space, and 150 hotel rooms, which will result in an increase of onsite population of 1,911 people (1,685 new residents and 226 average daily visitors). Onsite economic activities within the Makalapua Project District are expected to generate about \$146.6 million per year in rent revenues and direct sales of commercial and hotel uses, and consumption expenditures by new residents and visitors of the project. Corresponding profits will amount to about \$14.7 million per year. Onsite operating employment is expected to total about 225 FTE jobs, including jobs at

commercial and residential uses and hotels, which is estimated to result in the total payroll of about \$12.6 million per year.

At full build-out, the project will generate increased tax revenue to the State and County. At the same time, increased residents and visitors in the area may translate to increased cost of government. Increased tax revenues at full build-out for the State of Hawai'i will come through GET, Corporate Income Tax, Personal Income Tax, Recurring Conveyance Tax, and the Transient Accommodation Tax (TAT) from the various economic activities. The total tax revenue for the State from the project operation is estimated at \$8.3 million per year. On the other hand, increased residents and visitors in the area may translate to increased cost of government. These costs are difficult to estimate as government spending is not linearly related to population and the proposed project is also anticipated to accommodate projected population growth that is anticipated for the County. Based on conservative assumptions of State General Fund expenditures (public services) per defacto population (residents and visitors), the increased onsite population of 1,911 people may increase State General Fund expenditures by approximately \$7.2 million per year. As the increase in tax revenue to the State would exceed the anticipated expenditures, the project will generate a net positive fiscal impact for the State of Hawai'i of approximately \$1.1 million per year.

Similarly, the County of Hawai'i is expected to receive increased tax revenues from the Makalapua Project District, which includes Property Tax net increase, Hawaii County TAT, and GET Surcharge (0.5 percent). Expected tax revenue increase for the County is \$5.5 million per year. As was the case with the State of Hawai'i, the increased onsite population of 1,911 people may increase County general fund expenditures. Using similarly conservative assumptions as was applied with the State, the proposed project may result in an increase of County expenditures of \$3.6 million per year. The Makalapua Project District will generate a net positive fiscal impact for the County of Hawai'i of approximately \$1.9 million per year. Refer to **Appendix "M"**.

Based on the foregoing, the Makalapua Project District is anticipated to result in positive economic and fiscal impacts both during the development and operational phases of the project. Beyond the impacts quantified herein, the Makalapua Project District will provide significant short-term and long-term revenue sources to support Trust programs for orphan and destitute children.

#### 4. **Housing**

##### a. **Existing Conditions**

A range of housing types and conditions exists in the Kona region, from single-family ownership homes to luxury condominiums for part-time residents. In 2020, owner occupied housing comprised 69.8 percent of occupied housing units in Hawai'i County, compared to 61 percent statewide (U.S. Census Bureau, 2020). As mentioned previously, the relatively high proportion of owner-occupied housing on the island may be reflective of an abundance of resort ownership housing. The Kailua-Kona region, however, has considerably more rental and second home units than the county overall, with 62.9 percent being owner occupied (U.S. Census Bureau, 2020).

##### b. **Potential Impacts and Proposed Mitigation Measures**

The Makalapua Project District would add an approximately 600 residential units to the housing supply in the region over a 10-year time frame. These housing units will address the anticipated demand for new housing, given the projected population growth in the Kailua-Kona area. The proposed residential development will include a mix of medium- to high-density single-family and multi-family units for sale with the potential opportunity for rentals to offer residents multiple housing options. The specific mix of unit types and pricing will be further defined as the planning and design process for the project progresses. However, it is noted that the proposed project will comply with the County's affordable housing requirements in accordance with Hawai'i County Code Section 11-4, Affordable Housing Requirements, which would require at least 120 affordable housing credits for the 600 proposed residential units based on the current code. The regulations pertaining to affordable housing credits are specified in Section 11-5, Satisfaction of Affordable Housing Requirements.

### C. **PUBLIC SERVICES**

#### 1. **Police**

##### a. **Existing Conditions**

The Hawai'i Police Department (HPD) provides police and public safety services on the island of Hawai'i. The island is divided into eight (8) operational and patrol districts, with the Makalapua Project District area falling within the Kona District. The Kona District police station is located on Queen Ka'ahumanu Highway in Kealakehe, approximately one (1) mile

north of the project site. The Kona Police District covers 834 square miles and is staffed by 74 sworn officers as of 2021 (Hawai'i Police Department, 2021).

The HPD provides community police officers to develop partnerships within the community in an effort to create a safe and secure environment. There are 29 community police officers in the State, and the community officers for the west side of the island are supervised by two (2) sergeants (Hawai'i Police Department, 2021).

**b. Potential Impacts and Proposed Mitigation Measures**

Development of the proposed Makalapua Project District is not anticipated to extend the existing police service area for the Kona District Police Station. Property tax revenues generated by the proposed project will support County functions, including the Police Department. Therefore, significant adverse impacts on police and public safety services are not anticipated as a result of the proposed project.

**2. Fire Protection**

**a. Existing Conditions**

Fire protection and related emergency services are provided by the Hawai'i County Fire Department. The Kailua-Kona Fire Station is located 0.6 mile east of the proposed Makalapua Project District on Palani Road. The Station serves an area within a 30-mile radius, from Keauhou to the Hualālai Road. The Ka'ūpūlehu Volunteer Fire Station, located on Melomelo Street off of Kaiminani Drive, provides back-up support to the Kailua-Kona Fire Station. In 2012, the Makalei Fire Station opened on Mamalahoa Highway in North Kona. Additional County Fire Stations in West Hawai'i include the Keauhou, Waikoloa, and South Kohala Fire Stations.

**b. Potential Impacts and Proposed Mitigation Measures**

The development of the Makalapua Project District is not anticipated to extend the existing service area for fire protection and related emergency services in the West Hawai'i region. As discussed previously, the dry climate in the region may present risk for fire. The proposed infill development will reduce areas of dry brush, thereby reducing the risk of accidental wildfire within the project area. Fire Department access and water supply for the Makalapua Project District will be provided in accordance with the Hawai'i State Fire Code, National Fire Protection

Association 2006 version with County of Hawai'i amendments as requested by the Fire Department. Property tax revenues generated by the Makalapua Project District will support County functions, including the Fire Department. Therefore, significant adverse impacts on fire protection and related emergency services are not anticipated as a result of the proposed project.

**3. Medical Facilities**

**a. Existing Conditions**

The West Hawai'i region is served by the Hawai'i Health Systems Corporation's (HHSC) Kohala Hospital and Kona Community Hospital. Kohala Hospital, located in North Kohala, is a 26-bed critical access hospital providing 24-hour emergency care, skilled nursing, and intermediate care services. Kona Community Hospital, located in Kealahou, Kona, is a 94-bed full service medical center which provides acute inpatient care and related services. The Kona Community Hospital is located approximately ten (10) miles south of the Makalapua Project District.

Beyond the two (2) HHSC facilities, there is the North Hawai'i Community Hospital located in Waimea. This 40-bed facility, with 24-hour emergency services, is affiliated with Adventist Health, a private entity.

In addition to these major health care facilities, there are numerous privately operated medical and dental services available in West Hawai'i, including Kaiser Permanente Kona Medical Office in Kealahou, Ali'i Health Center in Kailua-Kona, and the West Hawai'i Community Health Center locations in Kailua-Kona, Kealahou, Kealahou, and Waikoloa.

**b. Potential Impacts and Proposed Mitigation Measures**

Residents and employees within the Makalapua Project District will certainly require health care and emergency medical services. However, the development of the Makalapua Project District is not anticipated to generate significant additional need for medical services in the West Hawai'i region. The project is not anticipated to be a significant population generator. Rather, the Makalapua Project District's residential component is meant to provide housing options for Hawai'i Island residents who are already living or working in Kona. A large majority of residents working in Kona travel from other areas on the island. This project is envisioned to provide homes for those residents so that they would not need to commute as far. As such, it is not anticipated that there would be significant adverse

strain on the capacity of the existing medical facilities. In addition, the proposed commercial space within the Makalapua Project District would allow for provision of medical office spaces. Significant adverse impacts to medical facilities are not anticipated as a result of the proposed project.

**4. Educational Facilities**

**a. Existing Conditions**

The Makalapua Project District is located within the State Department of Education’s (DOE) Kealakehe Complex of the Honoka’a-Kealakehe-Kohala-Konawaena Complex Area. The Kealakehe Complex includes Kealakehe High School (grades 9-12), Kealakehe Intermediate School (grades 6-8), Kealakehe Elementary School (grades Kindergarten-5), Hōlualoa Elementary School (grades Kindergarten-5) and Waikoloa Elementary and Middle School (grades Kindergarten-8).

**Table 4** provides current school enrollment information, as well as student capacity, for public schools within the Kealakehe Complex.

**Table 4.** Kealakehe Complex Public Schools Capacity and Enrollment

School	Capacity as of 2023	Enrollment 2023-2024
Kealakehe High School (grades 9-12)	1,334	1,397
Kealakehe Intermediate School (grades 6-8)	1,216	690
Kealakehe Elementary School (grades K-5)	838	889
Source: State of Hawai'i, Department of Education, 2024.		

In addition, there are three (3) charter schools located within the Kealakehe Complex, namely Innovations Public Charter School (grades 1-8), West Hawai'i Explorations Public Charter School (grades 6-12), and Kona Pacific Public Charter School (grades Kindergarten-7).

While Kealakehe Elementary School and Kealakehe High School are currently operating above capacity, per DOE early consultation and Draft EA comment letters dated September 21, 2023 and March 27, 2024, respectively, it is expected that over the next five (5) years, enrollment will drop below capacity.



**b. Potential Impacts and Proposed Mitigation Measures**

As the proposed Makalapua Project District is anticipated to provide housing for an already growing population, the proposed residential development within the Makalapua Project District would not be directly considered a direct cause of population growth. However, the location of the development may result in local changes to education demand. Public school students from the Makalapua Project District would attend schools in the Kealakehe Complex. The DOE provided early consultation and Draft EA comment letters dated September 21, 2023 and March 27, 2024, respectively, and noted that the DOE determined that the schools servicing the Makalapua Project District are Kealakehe Elementary, Kealakehe Intermediate, and Kealakehe High School. Kealakehe Intermediate School is currently operating below capacity and is projected to continue to operate at this capacity over the next five (5) years. Currently, Kealakehe Elementary School and Kealakehe High School are functioning beyond its capacity. However, the projected enrollment for the next five (5) years suggests that the school will be below its capacity.

It should also be noted that the Lili'uokalani Trust supports educational efforts through its mission. LT serves approximately 12,000 children annually, providing individual casework, counseling, and assistance through direct and group services and indirectly reaches thousands more through a variety of group and community building projects and collaborations with other community partners, including schools on Hawai'i Island.

**5. Recreational Facilities**

**a. Existing Conditions**

The Kona region offers a number of recreational opportunities for residents and visitors alike. In addition to resort recreational complexes, activities such as snorkeling, SCUBA diving, fishing, biking, and hiking are available.

Kailua Park is located adjacent to and southwest of the proposed Makalapua Project District area. The County has prepared a long-range master plan for the 117-acre park complex. The facility currently provides five (5) multi-purpose outdoor sports fields, the Kona Community Aquatics Center's 50-meter Olympic size swimming pool, Kekuaokalani Gymnasium, outdoor basketball courts, tennis courts, horseshoe pits, and public beach access. Proposed improvements to Kailua Park as part of the 20-year master plan include removal of the former airport runway and structures and development of a wide range of park improvements. New

park components include a senior center and youth center, canoe hālau complex, 25-yard swimming pool, skate park complex, and various playground apparatuses (County of Hawai'i, Department of Parks and Recreation, 2011).

Per a recent update from the County of Hawai'i Department of Parks and Recreation, Kailua Park is slated for several upgrades. Five (5) new pickleball courts are being built with completion anticipated in August 2024. Comfort stations, intended to replace the existing comfort stations, one (1) of which has been destroyed by arson, are also being built. Additional improvements are also being made at the Kona Community Aquatic Center.

In addition to Kailua Park, there are numerous other recreational facilities in the area. Beach parks in the vicinity include Wai'aha Beach Park, Pāhoehoe Beach Park, Magic Sands La'aloa Beach Park, Kohanaiki Beach Park, and Kahalu'u Beach Park. The County is also planning for a 193-acre Kealakehe Regional Park adjacent to the West Hawai'i Civic Center. The master-planning process for the park is currently underway, with plans for active and passive recreational uses.

Hawai'i State Parks in West Hawai'i include Kekaha Kai (Kona Coast) State Park and Kealakekua Bay State Historical Park.

There are also two (2) National Historical Parks managed by the National Parks Service located in West Hawai'i that provide residents and visitors with recreational and educational opportunities. The Kaloko-Honokohau National Historical Park is located approximately 2.5 miles northwest of the proposed Makalapua Project District, makai of Queen Ka'ahumanu Highway. The park was established to preserve, interpret, and perpetuate traditional native Hawaiian activities and culture by protecting the cultural and natural resources within the park (16 United States Code Section 396d(a)). The Kaloko-Honokohau National Historical Park was the site of a thriving Hawaiian settlement. The park includes coastal areas, two (2) large fishponds, more than 180 anchialine pools, and other archaeological remnants. Activities within the park include hiking, wildlife viewing, and a variety of ocean recreational opportunities.

The Pu'uhonua O Hōnaunau National Historical Park, formerly known as the City of Refuge Park, is located approximately 17 miles south of the proposed Makalapua Project District. The park preserves the site where, up until the early 19<sup>th</sup> century, Hawaiians who broke a kapu, or law, could flee to avoid certain death. The park includes the pu'uhonua, or place of

refuge, and a variety of archaeological sites, such as temple platforms, fishponds, and coastal village sites. Park visitors can enjoy fishing, hiking, snorkeling, wildlife viewing, and cultural demonstrations.

Honokohau Marina and Small Boat Harbor is also located in close proximity to the proposed Makalapua Project District. The marina is located approximately 1.75 miles from the Makalapua Project District area, just south of the Kaloko-Honokohau National Historical Park. The marina, maintained by the U.S. Army Corp of Engineers, has private and charter fishing, sailing, and tour boats docked at the facility. There are two (2) small sandy beaches located on either side of the marina.

Kailua Pier is located east of Kailua Park at Kailua Bay. In addition to hosting fishing tournaments, canoe races, and the Iron Man Triathlon, the Pier receives visitors from cruise ships and is a popular departure location for parasailing, snorkeling, and fishing boats.

**b. Potential Impacts and Proposed Mitigation Measures**

Adverse impacts to nearby recreational facilities are not anticipated as a result of the proposed project. The Makalapua Project District may improve public access to Kailua Park through the potential Makala Boulevard realignment contingent upon discussions with County agencies. Existing access to the gym and aquatic center driveways will not be adversely impacted by the project. LT will continue to coordinate with the County Department of Parks and Recreation and Department of Public Works regarding access to Kailua Park, including the realignment of Makala Boulevard.

Additionally, approximately 3.5 acres of open space is proposed within the Makalapua Project District for community use.

**6. Solid Waste Disposal**

**a. Existing Conditions**

The County's Department of Environmental Management (DEM), Solid Waste Division operates and maintains all solid waste collection and disposal facilities in the County of Hawai'i. This includes one (1) landfill, 21 transfer stations, and island-wide hauling operations in accordance with local, State, and Federal regulations.

The West Hawai'i Sanitary Landfill (WHSL), located in South Kohala, serves the entire island of Hawai'i. The WHSL has a permit for 23 cells with

13 being filled, one (1) being active, and one (1) in construction. The WHSL accepted approximately 17,000 tons per month in 2023 and its lifespan in 2024 is estimated to be less than 25 years.

Residential solid waste is accepted at any of the 21 solid waste transfer stations located on the island. In some areas, residents may hire a private collection company to pick-up their solid waste for disposal at WHSL or, if applicable, at the East Hawai'i Regional Sort Station in Hilo. The nearest transfer station to the Makalapua Project District is Kealakehe Transfer Station, Scrap Metal Yard, and Green waste Yard, located approximately one (1) mile to the north. The Transfer Station operates daily and accepts residential solid waste, scrap metal recycling, and green waste recycling.

**b. Potential Impacts and Proposed Mitigation Measures**

During construction, waste materials will be generated from site preparation and building activities. Construction waste materials that cannot be recycled or reused will be disposed of at the WHSL. In addition, DEM will be consulted to determine potential impacts from the project on the Municipal Waste Management capabilities. Consistent with County's "Zero Waste" goal and the *Zero Waste Plan for the County of Hawai'i*, LT will implement elements to reduce waste and divert resources from the landfill for proper recovery.

**D. INFRASTRUCTURE**

**1. Roadways**

**a. Existing Conditions**

A description of the roads that define the existing roadway network in the vicinity of the Makalapua Project District is provided below.

**Queen Ka'ahumanu Highway** is a north-south State arterial that runs between Kawaihae and Kailua-Kona. It is generally a two-lane undivided highway, but it widens to four (4) lanes between Keahole Airport Road and Malulani Drive. The posted speed limit is generally 35 miles per hour (mph). Between Makala Boulevard and Henry Street, bike lanes are provided on both sides of the roadway and sidewalks are provided on the makai side of the highway.

**Kuakini Highway** is a north-south two-way County roadway that generally runs along the coast through Kailua-Kona from Makala Boulevard to Queen Ka'ahumanu Highway. It is generally a two-lane undivided roadway, but it

widens to four (4) lanes between Palani Road and Hualalai Road. The posted speed limit is generally 25 mph. Some disjointed sidewalk segments are provided between Kaiwi Street and Palani Road. It is noted that Kuakini Highway is classified as a major collector street in the Kona Community Development Plan.

**Luhia Street** is a north-south two-way, two-lane County roadway, which originates at Makala Boulevard across from the Kona Commons Shopping Center Driveway and extends to Eho Street. The posted speed limit of this roadway is generally 25 mph. Bike lanes are provided on both sides of the street between Makala Boulevard and Eho Street and sidewalks are provided on both sides of the street between Makala Boulevard and mid-way between Loloku Street and Kaiwi Street.

**Road A** is a two-way, two-lane privately-owned unnamed roadway which provides additional access to Target and the Kona Commons Shopping Center. There is no posted speed limit along Road A. This roadway begins at its intersection with Old Mamalahoa Trail and terminates at Loloku Street. This roadway is referred to as “Road A” based on the proposed naming convention utilized in the Makalapua Project District conceptual plan map.

**Makala Boulevard** is an east-west two-lane road that runs between Kamakaeha Avenue and Kuakini Highway. It is County-owned, except for the portion west of the Kona Commons Shopping Center and mauka of Queen Ka’ahumanu Highway, where it is privately owned. From Kamakaeha Avenue and Queen Ka’ahumanu Highway it is a three-lane roadway; between Queen Ka’ahumanu Highway and the Shopping Center makai driveway it is a four-lane divided roadway; and west of Shopping Center makai driveway it is a two-lane undivided roadway. The posted speed limit is generally 25 mph. Bike lanes and sidewalks are provided on both sides of the roadway between Queen Ka’ahumanu Highway and Kona Commons makai driveway.

**Loloku Street** is an east-west two-way, two-lane County roadway that runs between Luhia Street and Kuakini Highway. The posted speed limit is generally 25 mph and traffic is generally light. Sidewalks are provided on both sides of the roadway between Luhia Street and Kuakini Highway.

**Kaiwi Street** is an east-west two-way, two-lane County roadway that runs between Queen Ka’ahumanu Highway to Kuakini Highway, opposite Kona Bay Drive. A two-way left turn median is provided along this roadway between Luhia Street and Kuakini Highway. The posted speed limit is

generally 25 mph. Kaiwi Street does not have existing bike lanes or sidewalks.

**Eho Street** is an east-west County roadway that extends from Queen Ka'ahumanu Highway to Alapa Street. Eho Street provides one-way access north of Luhia Street and is a two-way, two-lane undivided roadway south of Luhia Street. Sidewalks are provided on both sides of the roadway between Queen Ka'ahumanu Highway and Luhia Street.

**Palani Road** is an east-west two-way, two-lane County roadway that runs between Mamalahoa Highway and Ka'ahumanu Place, where it transitions into Ali'i Drive. This roadway is a four-lane roadway to the east of Kuakini Highway and a two-lane roadway to the west of Kuakini Highway. The posted speed limit ranges between 15 and 25 mph. Sidewalks are provided on both sides of the roadway between Queen Ka'ahumanu Avenue and Kuakini Highway and along the westbound traffic lane between Kuakini Highway and Ka'ahumanu Place.

**Ma'a Way** is a north-south two-way, two-lane County roadway running between Loloku Street and Kaiwi Street. Bike lanes and sidewalks are provided on both sides of the roadway.

**Pawai Place** is a north-south, two-way County roadway beginning north of the project site at the Kaiwi Street intersection and continues south to the Kona Brewing Company. There is no posted speed limit along this roadway.

The Traffic Impact Analysis Report (TIAR) prepared for the project noted varying degrees of traffic throughout the roadways and intersections in and around the project area. See **Appendix "N"**. It is noted that the TIAR has been updated since the publication of the Draft EA based on the comment provided by the State Department of Transportation (HDOT) requesting the use of the 2023 Federal Highway Administration Manual on Uniform Traffic Control Devices that will be adopted on October 1, 2024. The TIAR utilizes a Level of Service (LOS) analysis. LOS is a qualitative measure used to describe the conditions of traffic flow, with values ranging from free-flow conditions at LOS A to congested conditions at LOS F.

Based on traffic count data collected on September 7, 8, and 10, 2022, the weekday morning (AM) and afternoon (PM) peak hours of traffic were determined to occur between 8:30 a.m. to 9:30 a.m., and between 3:30 p.m. to 4:30 p.m., respectively. The Saturday mid-day (WE) peak hour of traffic was determined to be between 11:30 a.m. to 12:30 p.m. The overall

LOS ratings for the existing study intersections are summarized in **Table 5** below.

**Table 5. Overall Levels of Service Observed for Existing Study Intersections**

<b>Intersection</b>	<b>AM</b>	<b>PM</b>	<b>WE</b>
Queen Ka‘ahumanu Highway/Makala Boulevard	C	D	C
Queen Ka‘ahumanu Highway/Kaiwi Street*	--	--	--
Queen Ka‘ahumanu Highway/Eho Street**	--	--	--
Queen Ka‘ahumanu Highway/Palani Road	D	D	C
Makala Boulevard/Luhia Street	B	B	B
Makala Boulevard/Midblock Driveway	B	B	B
Makala Boulevard/Road A	B	B	B
Loloku Street/Ma‘a Way	A	B	B
Pawai Place/Kaiwi Street	B	D	C
Kuakini Highway/Makala Boulevard	A	B	B
Kuakini Highway/Loloku Street	B	B	C
Kuakini Highway/Kaiwi Street	B	E	D
Kuakini Highway/Palani Road	C	D	C
* Based on field observations, the eastbound right-turn does not experience any delay. ** Based on field observations, the southbound right-turn operates un-impeded. Source: Austin, Tsutsumi & Associates, Inc.			

The Hele-On Bus is the primary public transportation provider for the island. The Hilo to Kona, Intra-Kona, Honoka‘a to Kailua Kona, and North Kohala to Hilo to Pahala bus routes provide service in the vicinity of the proposed Makalapua Project District. Nine (9) bus routes service the Intra-Kona area with headways about every 1 hour. Service runs from 6:00 a.m. to around 9:30 p.m.

**b. Potential Impacts and Proposed Mitigation Measures**

The proposed Makalapua Project District will be organized around an interconnected street network that fulfills recent State and County policies and best practices for Complete Streets, which seeks to reasonably accommodate convenient access and mobility for all users of public highways within their respective jurisdictions as described under HRS, Section 264-1, including pedestrians, bicyclists, transit users, motorists, and persons of all ages and abilities. The project will be designed to support a variety of transportation options with multi-modal design appropriate for the area and compatible with surrounding land uses.

Access to the Makalapua Project District will be provided from the existing Makala Boulevard, Kuakini Highway, Loloku Street, and Kaiwi Street. Additionally, improvements are planned to the existing Ma'a Way and Pawai Place to extend these roadways past their current termini through to the northern boundary of the project to provide additional interior access points. At this stage, the locations of additional interior access points are unknown and will be developed as further planning of the individual blocks continues. Locations of these access points will be coordinated with the County of Hawai'i, Department of Public Works (DPW) as may be required.

The following roadway improvements are proposed as part of the Project District:

**Makala Boulevard** – The potential realignment of Makala Boulevard from Ma'a Way to Kuakini Highway is proposed to align Makala Boulevard with Old Kona Airport State Recreation Area Access, hereinafter referred to as Park Access.

**Ma'a Way Extension** – Extension of Ma'a Way north through the Project from its existing terminus at Loloku Street to Makala Boulevard.

**Pawai Place Extension** – Extension of Pawai Place north through the Project from its future terminus at Loloku Street to Makala Boulevard.

The Pawai Place extension, together with the "Village Green" open spaces located along the extension, will offer a variety of commercial uses and social activities to connect the Makalapua Project District with the Kona Industrial Subdivision. The Makalapua Project District will provide public access to the adjacent Kailua Park via Makala Boulevard. Existing access to the gym and aquatic center driveways will not be adversely impacted by the project.

A TIAR was prepared for the project to assess traffic impacts attributed to the proposed project and to identify appropriate mitigation measures to address these impacts. Refer to **Appendix "N"**. It is noted that the proposed Makalapua Project District is anticipated to be built out over a three-phase development horizon, spanning approximately ten (10) years. The TIAR includes an analysis based on the years 2027, 2032, and 2042 in accordance with the Hawai'i County Code concurrency requirement, which requires future growth projections for a minimum of five (5), ten (10), and 20 years.

Based on trip generation rates published by the Institute of Traffic Engineers, the project is anticipated to generate approximately 555, 901,



and 1,087 net new external trips during morning, afternoon, and weekend peak hours of traffic respectively, in 2032 assuming full build-out. **Table 6** provides a breakdown of the anticipated trip generation for each phase. It is noted that the trip generation presented for 2032 and 2042 are cumulative to include the preceding phases.

**Table 6.** Project Trip Generation (Net External Trips)

	<b>AM Peak Hour</b>	<b>PM Peak Hour</b>	<b>WE Peak Hour</b>
Year 2027	237	553	708
Cumulative Year 2032	555	901	1087
Cumulative Year 2042	555	901	1087
Source: Austin, Tsutsumi & Associates, Inc.			

The TIAR presents an analysis of traffic projections with and without the project in 2027, 2032, and 2042. The traffic projections for the without the project scenarios are based upon traffic generated from 17 known background projects in the region added to a universally applied 0.5 percent annual growth rate, which accounts for any unanticipated infill growth as a result of smaller developments. In addition, the TIAR presented recommended roadway improvements (in addition to the planned roadway improvements), which are included in the analysis under the “with the project with mitigation” scenario for Year 2027, 2032, and 2042, respectively.

Below is a discussion of the anticipated overall LOS ratings for the three (3) study years assessed in the TIAR.

**Year 2027 Analysis**

**Table 7** summarizes the anticipated LOS without and with the proposed project and with the project with mitigation in 2027. It is noted that by 2027, the project is anticipated to be partially completed with 56 multi-family dwelling units, 60 hotel units, and 169,500 square feet of commercial space.

**Table 7.** Overall Levels of Service in 2027 Without and With the Proposed Project

Intersections	Without Project			With Project			With Project and With Mitigation		
	AM	PM	WE	AM	PM	WE	AM	PM	WE
Queen Kaahumanu Highway/Makala Boulevard	C	D	C	C	D	C	C	D	C
Queen Kaahumanu Highway/Kaiwi Street	-	-	-	-	-	-	-	-	-
Queen Kaahumanu Highway/Eho Street	-	-	-	-	-	-	-	-	-
Queen Kaahumanu Highway/Palani Road	D	D	C	D	D	C	D	D	C
Makala Boulevard/Luhia Street	B	B	B	B	B	B	B	B	B
Makala Boulevard/ Midblock Driveway	B	B	B	B	B	B	B	B	B
Makala Boulevard/Road A	B	B	B	B	C	B	B	C	B
Loloku Street/Maa Way	B	B	B	B	B	B	B	B	B
Pawai Place/Loloku Street	-	-	-	-	-	-	-	-	-
Pawai Place/Kaiwi Street	C	D	C	C	E	C	C	E	C
Kuakini Highway/Makala Boulevard	A	B	B	A	B	C	A	B	C
Kuakini Highway/Loloku Street	B	C	C	B	C	D	B	C	D
Kuakini Highway/Kaiwi Street	B	F	E	C	F*	F*	A	B	A
Kuakini Highway/ Palani Road	C	D	C	C	D	C	C	D	C

Source: Austin, Tsutsumi & Associates, Inc.

\* Indicates overcapacity conditions, v/c ratio >1.

The LOS for the without project scenario is based on the assumption that no improvements will be made to the specified intersections. The LOS for the with project scenario includes the Pawai Place extension through the project from its existing terminus at Kaiwi Street through Loloku Street, which is a portion of the planned roadway improvements as part of the Makalapua Project District and is anticipated to be completed by 2027.

The TIAR recommended additional roadway improvements as a result of traffic increases due to the project and other future developments in Kailua-Kona by 2027. The LOS for the specified intersections under with the

project with mitigation scenario is based on the assumption that the following improvement is implemented. It is noted that the roadway improvement recommended below is currently not funded but are anticipated to be required as a result of both projected background development traffic and traffic generated by the project. As the recommended traffic improvements listed below are not solely triggered by the Makalapua Project District project but are also attributable to ambient growth and other known development projects in the region, LT would participate in a pro rata cost sharing program with other landowners and developers to the satisfaction of the HDOT and DPW.

- The Kuakini Highway/Kaiwi Street intersection
  - Construct a new traffic signal when warranted

### **Year 2032 Analysis**

**Table 8** summarizes the anticipated LOS without and with the proposed project and with the project with mitigation in 2032. It is noted that by 2032, the project is anticipated to be fully completed.

The LOS with project is based on the assumption of the following planned roadway improvements that will be implemented as part of the Makalapua Project District:

- Makala Boulevard Realignment to align with the Kailua Park access
- Ma'a Way extension north through the Makalapua Project District from its existing terminus at Loloku Street to Makala Boulevard
- Pawai Place Extension north through the project from its future terminus at Loloku Street to Makala Boulevard.

The TIAR recommended additional roadway improvements as a result of traffic increases due to the project and other future developments in Kailua-Kona by 2032. The LOS for the specified intersections under the project with mitigation scenario is based on the assumption that the following improvements are implemented. It is noted that roadway improvements recommended below are currently not funded but are anticipated to be required as a result of both projected background development traffic and traffic generated by the project. As the recommended traffic improvements listed below are not solely triggered by the Makalapua Project District project but are also attributable to ambient growth and other known development projects in the region, LT would participate in a pro rata cost

**Table 8.** Overall Levels of Service in 2032 Without and With the Proposed Project

Intersections	Without Project			With Project			With Project and With Mitigation		
	AM	PM	WE	AM	PM	WE	AM	PM	WE
Queen Kaahumanu Highway/Makala Boulevard	C	D	C	C	E	D	C	D	C
Queen Kaahumanu Highway/Kaiwi Street	-	-	-	-	-	-	-	-	-
Queen Kaahumanu Highway/Eho Street	-	-	-	-	-	-	-	-	-
Queen Kaahumanu Highway/Palani Road	D	D	C	D	D	D	D	D	D
Makala Boulevard/Luhia Street	B	B	B	B	B	B	B	B	B
Makala Boulevard/ Midblock Driveway	B	B	B	B	B	C	B	B	C
Makala Boulevard/Road A	B	B	B	B	B	B	B	B	B
Makala Boulevard/Maa Way	-	-	-	B	D	F	B	D	F
Loloku Street/Maa Way	B	B	B	B	C	C	B	C	C
Makala Boulevard/Pawai Place	-	-	-	B	C	D	B	C	D
Pawai Place/Loloku Street	-	-	-	B	B	B	B	B	B
Pawai Place/Kaiwi Street	C	E	C	C	F	C	C	F	C
Kuakini Highway/Makala Boulevard	A	B	C	B	C	D	B	C	D
Kuakini Highway/Loloku Street	B	C	C	C	E	F	C	E	F
Kuakini Highway/Kaiwi Street	C	F*	F	A	B	B	A	B	A
Kuakini Highway/ Palani Road	D	D	C	D	E	D	D	D	D

Source: Austin, Tsutsumi & Associates, Inc.

\* Indicates overcapacity conditions, v/c ratio >1.

sharing program with other landowners and developers to the satisfaction of the HDOT and DPW.

- Widen Queen Ka’ahumanu Highway from two (2) through lanes to three (3) through lanes in the southbound direction
- Widen Kuakini Highway from one (1) through lane to two (2) through lanes in the southbound direction between Palani Road and Kaiwi Street
- At Queen Ka’ahumanu Highway/Makala Boulevard
  - Widen Queen Ka’ahumanu Highway from two (2) through lanes to three (3) in the southbound direction.
- Kuakini Highway/Palani Road
  - Widen southbound approach to provide an additional through lane.

**Year 2042 Analysis**

**Table 9** summarizes the anticipated LOS without and with the proposed project and with the project with mitigation in 2042.

**Table 9.** Overall Levels of Service in 2042 Without and With the Proposed Project

Intersections	Without Project			With Project			With Project and With Mitigation		
	AM	PM	WE	AM	PM	WE	AM	PM	WE
Queen Kaahumanu Highway/Makala Boulevard	D	F	E	D	E	E	D	E	D
Queen Kaahumanu Highway/Kaiwi Street	-	-	-	-	-	-	-	-	-
Queen Kaahumanu Highway/Eho Street	D	D	C	D	D	D	E	E	D
Queen Kaahumanu Highway/Palani Road	D	E	D	D	E	E	D	D	D
Makala Boulevard/Luhia Street	B	B	B	B	B	C	B	B	C
Makala Boulevard/ Midblock Driveway	B	B	B	B	B	C	B	B	C
Makala Boulevard/Road A	B	B	B	B	B	B	B	B	B
Makala Boulevard/Maa Way	-	-	-	B	F	F	B	F	F
Loloku Street/Maa Way	B	B	B	B	C	C	B	C	C

Intersections	Without Project			With Project			With Project and With Mitigation		
	AM	PM	WE	AM	PM	WE	AM	PM	WE
Makala Boulevard/Pawai Place	-	-	-	B	D	E	B	D	E
Pawai Place/Loloku Street	-	-	-	B	B	B	B	B	B
Pawai Place/Kaiwi Street	C	E	C	C	F	D	C	F	D
Kuakini Highway/Makala Boulevard	B	C	D	B	E	F*	C	F	F*
Kuakini Highway/Loloku Street	C	D	D	C	F*	F*	C	E	F
Kuakini Highway/Kaiwi Street	D	F*	F*	A	D	B	A	B	A
Kuakini Highway/ Palani Road	D	F	F	E	F	F	D	E	D

Source: Austin, Tsutsumi & Associates, Inc.  
\* Indicates overcapacity conditions, v/c ratio > 1.

There are no additional roadway projects assumed to be implemented by Year 2042 associated with the Makalapua Project District, as full buildout is projected to occur by 2032.

The TIAR recommended additional roadway improvements as a result of traffic increases due to the project and other future developments in Kailua-Kona by 2042. The LOS for the specified intersections with the project with mitigation scenario is based on the assumption that the following improvements are implemented. The roadway improvements recommended below are currently not funded but are anticipated to be required as a result of both projected background development traffic and traffic generated by the project. As the recommended traffic improvements listed below are not solely triggered by the Makalapua Project District project but are also attributable to ambient growth and other known development projects in the region, LT would participate in a pro rata cost sharing program with other landowners and developers to the satisfaction of the HDOT and DPW.

Widen Queen Ka'ahumanu Highway from two (2) through lanes to three (3) through lanes in the northbound direction from the Makala Boulevard intersection to the Palani Road intersection. Extend the southbound widening to Palani Road.

Extend the Kuakini Highway widening from one (1) through lane to two (2) through lanes in the southbound direction from Kaiwi Street to Makala Boulevard.

Widen Kuakini Highway from three (3) through lanes to four (4) through lanes from Palani Road to Kaiwi Street.

- Queen Ka‘ahumanu Highway/Makala Boulevard:
  - Widen Queen Ka‘ahumanu Highway from two (2) through lanes to three (3) through lanes in the northbound direction
- Queen Ka‘ahumanu Highway/Eho Street
  - Widen Queen Ka‘ahumanu Highway from two (2) through lanes to three (3) through lanes in the northbound direction
- Queen Ka‘ahumanu Highway/Palani Road
  - Widen Queen Ka‘ahumanu Highway from two (2) through lanes to three (3) through lanes in the northbound direction
- Kuakini Highway/Makala Boulevard
  - Widen Kuakini Highway in the vicinity of the intersection to provide an exclusive northbound left-turn lane and an exclusive northbound right-turn lane.
  - Convert from an all-way stop intersection to a T-intersection with stop-control along Kuakini Highway.
- Kuakini Highway/Loloku Street
  - Widen Kuakini Highway in the vicinity of the intersection to provide an additional southbound lane.
- Kuakini Highway/Kaiwi Street
  - Widen Kuakini Highway in the vicinity of the intersection to provide an additional southbound lane.
  - Modify southbound approach to have a shared left-turn/through lane and a shared through/right-turn lane.
- Kuakini Highway/Palani Road
  - Widen Kuakini Highway north of Palani Road to accommodate two (2) northbound receiving lanes.
  - Modify the northbound approach to restripe the dedicated right-turn lane to a shared through/right-turn lane.

Given the development timeframe of three (3) phases over 10 years, the TIAR also recommends that regular updates be conducted to determine the actual traffic growth and required improvements.

## 2. **Water System**

### a. **Existing Conditions**

The proposed Makalapua Project District is within the Department of Water Supply's (DWS) 325-foot water service zone. Existing DWS infrastructure in the vicinity of the project includes 8-inch water mains in Kaiwi Street and Makala Boulevard in the Kona Commons Shopping Center area and an existing 12-inch potable waterline in Loloku Street connecting the Kona Commons Shopping Center to Kona Industrial Subdivision and Kuakini Highway. The DWS 325-foot system is served by the 0.3 million gallon (mg) Palani Station No. 1 reservoir, and the 2.0 mg Pua Pua'a reservoir near the Pualani Estates Subdivision.

The water source for the Makalapua Project District is the Keauhou Aquifer System, which is comprised of basal, high-level and deep-confined freshwater aquifers. The current sustainable yield for the aquifer set by the Commission on Water Resources Management is 38 million gallons per day (mgd). Current pumpage from the aquifer is approximately 14.5 mgd, and planning studies by DWS indicate a maximum pumping rate with projected demands based on full build out of all projects allowable by County zoning of just over 28 mgd. Refer to **Appendix "B"**.

### b. **Potential Impacts and Proposed Mitigation Measures**

The existing DWS system will serve the proposed Makalapua Project District. The Infrastructure Report prepared for the project estimated that the proposed Makalapua Project District will generate an average daily demand of approximately 327,450 gallons per day (gpd) of potable water. Refer to **Appendix "B"**.

LT will continue to coordinate with DWS regarding available water for the project. LT's currently available water credits with the DWS in accordance with the Keahuolū Lands Water Resources Development Agreement (KLWRA) and the Makalapua Business Center (MBC) Water Commitment are planned to be used for the development of the Makalapua Project District. Water credits are expressed in equivalent units based on a maximum day demand of 600 gpd. Maximum day demand is calculated by multiplying average day demand by a factor of 1.5. Therefore, 819 water credits are required for the proposed Makalapua Project District. It is noted



that the number of credits required will be reduced by the previously allocated water credits for parcels along Kaiwi Street and Loloku Street. As such, the adjusted amount of water credits required for the Makalapua Project District is 717 units. LT has sufficient amount of water credits to accommodate the proposed Makalapua Project District at this time. However, it is noted that LT has other planned projects in Kona that are in various planning stages and will also require water credits. LT is in the process of developing a new regional water source, which will be dedicated to the County. This new water source would provide water for the County's future water needs in the region and would provide an allocation to LT to support its planned projects in Kona. Refer to **Appendix "B"**. The new well source seeks to tap the deep-confined freshwater aquifer under the saltwater and basal water bodies and thus is understood to discharge far offshore into deeper waters is not anticipated to impact near shore tidal groundwater dependent ecosystems or deepwater offshore cultural practices (Attias E, Thomas D, Sherman D, Ismail K, 2020).

Eight (8)-inch or 12-inch distribution mains are planned in all roads proposed within the project, including the roads proposed for dedication to the County as well as private roads. Analysis of the Peak Hour and Maximum Daily plus Fire Flow scenarios show there are high levels of pressure available. Therefore, pressure reducing units shall be installed at each water connection. All system improvements will be developed in accordance with the Water System Standards, State of Hawai'i dated 2002. The proposed water system improvements are illustrated in the Infrastructure Report presented in **Appendix "B"**.

Planning for the Makalapua Project District incorporates water conservation and efficiency measures. The County Department of Environmental Management (DEM) is currently in the design stage of upgrading the Kealakehe Wastewater Treatment Plant (WWTP) to produce R-1 quality water. Although there is currently no available source of R-1 quality water for reuse, it is anticipated that DEM will install a pipeline for R-1 water to Kailua Park. If a source of R-1 water is made available close to the Makalapua Project District, its use would be considered.

### 3. **Wastewater System**

#### a. **Existing Conditions**

The Kealakehe WWTP is a regional County facility that treats wastewater. It is located approximately one (1) mile to the northwest of the proposed Makalapua Project District. Its service area extends from Keauhou to the

south and Kealakehe to the north. Current treated flow for the Kealakehe WWTP is approximately 2.0 mgd with a maximum capacity of 5.3 mgd.

Kealakehe Sewage Pump Station (SPS) is a regional facility located south of the Kona Aquatic Center that pumps sewage from the Kona Industrial Subdivision and areas south of Kailua-Kona to the Kealakehe WWTP via a 24-inch sewer force main. There is an existing 15-inch gravity sewer main within the Makalapua Project District site in Loloku Street and Kuakini Highway that currently serves the Makalapua Shopping Center, Kona Commons Shopping Center and part of the Kona Industrial Subdivision. Refer to **Appendix “B”**.

It is noted that there is ongoing litigation filed by Hui Mālama Honokōhau against the County of Hawai‘i, arguing that discharging treated sewage from the Kealakehe WWTP into Honokōhau Harbor requires a permit pursuant to the Federal Water Pollution Control Act.

**b. Potential Impacts and Proposed Mitigation Measures**

The sewer system will be designed in accordance with the “Wastewater System Design Standards, City and County of Honolulu”, dated July 2017 and to satisfy the requirements of the DEM. The proposed wastewater improvements are illustrated in the Infrastructure Report presented in **Appendix “B”**.

The wastewater system is broken up into three (3) segments throughout the Makalapua Project District:

- **Segment 1**

Majority of the parcels will flow through private property and/or a public roadway system and will be conveyed by a 8-inch gravity sewerline to a private SPS at the intersection of Makala Boulevard and Kuakini Highway. The wastewater will be pumped from the private SPS through a 6-inch force main to a discharge manhole in Kuakini Highway. The wastewater will then be conveyed by gravity through a 12-inch main in Kuakini to connect to the existing sewer system (ESMH-12464) in Loloku Street. The southeastern portion of the project, between Kuakini Highway and Pawai Place, will utilize the existing sewer lateral in Loloku Street which is connected downstream of ESMH-11002. The sewer will then flow to Kealakehe SPS at the south-east corner.

The project is anticipated to generate peak wastewater flows of 0.4546 mgd for Segment 1.

- **Segment 2**

To eliminate the need to connect a new sewerline to the existing influent box at the Kealakehe SPS, the existing flows in the existing 15-inch sewer (above ESMH-11002) in the intersection of Loloku Street and Pawai Place, will be diverted and connected to the existing 18-inch sewer gravity line in Kaiwi Street, which flows to the Kealakehe SPS via the existing 42-inch sewerline in Kauakini Highway. The existing 15-inch sewerline will be cut and plugged right below the diversion sewer manhole.

The project is anticipated to generate peak wastewater flows of 0.1060 mgd for Segment 2.

- **Segment 3**

Southwestern portions of the Makalapua Project District (parcels south of Loloku Street, between Kuakini Highway and the existing BMW parcel) will continue to utilize the existing laterals which are connected to the existing 6-inch sewer gravity line in Kaiwi Street, which flows to the Kealakehe SPS via the existing 42-inch sewer line in Kuakini Highway.

**Peak wastewater flows for Segment 3 is anticipated to remain the same as existing conditions.**

Refer to **Appendix “B”**.

DEM has reviewed sewer calculations and figures for the Makalapua Project District and agreed that in concept, the proposed sewer plan is a viable option. DEM will require flow data to confirm the existing capacity of the sewer system to make a final determination on whether the system can accommodate the proposed Makalapua Project District flows.

#### **4. Drainage System**

- a. **Existing Conditions**

The undeveloped portions of the Makalapua Project District are characterized by old lava fields. Depending on the type of lava rock, stormwater runoff will flow and then infiltrate into the ground. In the developed portions of the project area, there are existing catch basins,

drain intakes, pipes, and drywells that convey and dispose of stormwater runoff. The site gently slopes downward from the northeast to the southwest, with elevations ranging from 10 feet to 40 feet msl. Ground slopes range from 0 percent to 12 percent, with an average slope of 3 percent. The existing 10-year peak stormwater runoff for the Makalapua Project District area is approximately 38 cubic feet per second (cfs). Refer to **Appendix “B”**.

**b. Potential Impacts and Proposed Mitigation Measures**

Stormwater runoff will be collected by swales, ditches, gutters, inlets, and/or catch basins and conveyed to drywells and/or infiltration areas for onsite disposal. Preliminary estimates indicate that a drywell would have the capacity to dispose of three (3) cfs of stormwater runoff. Preliminary hydrologic calculations indicate a 10-year peak stormwater runoff rate of approximately 151 cfs; therefore, approximately 74 drywells may be required. Refer to **Appendix “B”**. The drywells are proposed in parking lots, along roadways, and other locations where space is available throughout the project site. An underground injection control permit will be required by the State of Hawai‘i, Department of Health (DOH) to construct and operate the drywells. With the construction of the 74 drywells, no drainage impacts to downstream properties and nearshore waters are anticipated. In general, the post-development drainage pattern will be similar to the existing drainage pattern.

Drainage improvements will be designed in accordance with the “Storm Drainage Standards”, Department of Public Works, County of Hawai‘i, dated October 1970, as amended. Permanent BMPs and LID strategies, such as permeable paving systems, bio-swales, and bio-filtration for stormwater management, are being considered for the proposed project to minimize pollutants from entering the ground and nearshore waters. Based on the land uses proposed for the Makalapua Project District, potential pollutants that may be produced by the project include nutrients, sediment, trash, pathogens, pesticides/herbicides, oil and grease, metals, and organic compounds. Source Control BMPs and Permanent Treatment Control BMPs are being considered to address these potential pollutants. Possible Source Control BMPs that may be utilized for the project include limiting runoff from landscaped areas to impervious areas; designing irrigation systems to minimize runoff of excess irrigation runoff and promote surface filtration; providing stenciling or labeling of all storm drain inlets and catch basins with prohibitive language; including overhanging roof structure or canopy over fuel dispensing areas; paving fuel dispensing areas with Portland cement concrete; designating a car wash area for

apartment buildings and directing/diverting wash water to vegetated areas or an engineered infiltration system; grading parking areas to direct runoff towards vegetated/landscaped areas or other Post-Construction Treatment Control BMPs.

As noted above, with the installation of drainage improvements, no impacts to downstream properties and nearshore waters are anticipated.

## **5. Electrical, Telephone, and Cable TV Service**

### **a. Existing Conditions**

Hawaiian Electric (HE), formerly known as Hawai'i Electric Light Company and Hilo Electric Light Company, is the main electricity provider to the island of Hawai'i. HE is a State Public Utilities Commission (PUC) regulated utility company. Most of Hawai'i Island's power, approximately 178 Mega Volt Amp (MVA), is generated by three (3) fossil fuel burning plants located on the east, Kanoelehua, west, Keahole and north, Waimea, sides of the island and delivered through a number of 69 kilo-Volt (kV) transmission corridors. The 69 kV transmission lines connect HE's generators, other third-party generators and grid-scale alternate energy producers with transmission switching stations to step the transmission voltage down to sub-transmission voltage levels (34.5 kV) that provide power to distribution substations. These distribution substations, in turn, provide 12 kV, 11.5 kV, and a limited amount of 4.16 kV distribution power that serve HE's utility customers on Hawai'i Island. The source for the 12-kV distribution power to the Kailua-Kona area are HE's existing Kailua, Palani, and Kealakehe Substations. HE's transmission (69 kV) and sub-transmission lines within the Kailua-Kona area are overhead with supporting metal or wood utility poles. HE's distribution and secondary lines, which carry electricity at lower voltage to individual homes, businesses, and neighborhoods, are routed both overhead and underground depending on when they were constructed.

Hawaiian Telecom (HT) and Spectrum Oceanic (Spectrum) are the main cable providers. Their high bandwidth, trunking cables, are mostly overhead and jointly supported by the same utility transmission and sub-transmission poles as HE.

Existing additional offsite facilities that would serve the property are HT's Kailua-Kona central office located near the intersection of Queen Ka'ahumanu Highway and Palani Road and Spectrum's Facility located to the north in the Kaloko Industrial Park.

**b. Potential Impacts and Proposed Mitigation Measures**

LT will be responsible for underground telecommunication infrastructure for Spectrum and/or HT. Similarly, the cost of new electric facilities and infrastructure will likely be the responsibility of LT. Funding mechanisms and responsibilities vary depending on what the project entails and what type of electrical facility is being improved. In general, proponents of new developments and re-developments are required to fund and construct the underground infrastructure associated with their respective developments. Project developers are usually assessed 100 percent of the cost for relocation work by utility companies, which is expected here.

HE has a pre-service request process for master plans, such as the Makalapua Project District which will allow them to review conceptual development plans to determine whether adequate capacity is available or if offsite improvements will be required.

The proposed electric and communication systems will be developed in accordance with the specifications and standards of HE, HT, and Spectrum. The electrical network to serve the Makalapua Project District consists of the Palani, Kailua, and Kealakeha Substations. The closest power source is Kailua Substation. As a result of the pre-service request submission to HE, a Power Feasibility Study was conducted. A response letter, dated August 21, 2023 indicated the Kailua Substation currently has sufficient capacity to support the Makalapua Project District. However, an updated project plan with slightly increased residential unit counts (which represents the current plan assessed in this Final EA) was submitted to HE in October 2023. In addition, HE changed their method to calculate power demands for hotels and reclassified hotels from commercial use to residential use. Based on these changes, an updated Power Feasibility Study was prepared and resulted in an increased estimated total demand for the project. Subsequently, HE provided a response letter dated July 8, 2024, which superseded the previous response, indicating that the Kailua Substation and the existing offsite distribution system do not have sufficient capacity to support the revised estimated total demand for the full build-out of the Makalapua Project District. The Infrastructure Report indicated that based on the comparison between the two (2) HE response letters, it appears there is sufficient capacity for the near-term development of the Makalapua Project District. Refer to **Appendix “B”**. However, it should be noted that the Kailua Substation is a regional facility supporting the Kailua-Kona area and other new developments that would be served by the Kailua Substation may occur elsewhere and potentially affect the substation’s capacity to serve the Makalapua Project District.

Preliminary input by HE indicated that electric service will likely be extended from HE's Makala Boulevard and Loloku Street systems. The July 8, 2024 response letter from HE indicated that additional offsite electrical improvements, including the addition of a substation transformer and a minimum of two (2) new distribution circuits from the proposed substation transformer to the project location, will be required. The current offsite distribution system consists of underground conduit and cabling on Makala Boulevard, Luhia Street, and Loloku Street and overhead conductors on utility poles along Kaiwi Street, Luhia Street, and Kuakini Highway. Due to uncertainty of the provisions necessary for new distribution circuits from the Kailua Substation to the property, provisions for new HE ductline along the existing offsite distribution system and Pawai Place are anticipated to be required for the Makalapua Project District. Based on this information, LT will maintain communication with HE throughout the planning and development process to ensure that HE is able to meet the anticipated electricity demands for the Makalapua Project District and necessary offsite infrastructure improvements are implemented for the project.

Regarding telecommunications, HT has preliminarily indicated that the existing HT duct system along Loloku Street and the existing overhead system along Kaiwi Street can be extended to the property. Primarily, Spectrum has indicated that the existing Spectrum handhole on Makala Boulevard can be used to extend their service to the property. Separate conduit laterals will be provided for HT and Spectrum.

Onsite electric and communication systems will consist of concrete enclosed PVC conduits between the curb and the edge of the road shoulder. Manholes and handholes would be placed periodically to serve as pulling points for the utilities and as service points. HE will require transformer pads and switchgear pads. The switchgear pads will offer protection and help reduce outages.

HT will require an eight (8) foot by eight (8) foot easement for fiber distribution hubs. Spectrum may require a six (6) foot by six (6) foot easement for cable nodes.

With a diverse peak load estimate for the Makalapua Project District of 7,104 kilovolt Amperes (kVA), the proposed improvements to the electrical systems in the project vicinity are expected to provide adequate service for the development.

## **E. CUMULATIVE AND SECONDARY IMPACTS**

Cumulative impacts are defined by Title 11, Chapter 200.1, Hawai'i Administrative Rules (HAR), Environmental Impact Statement Rules as:

*The impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes the other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.*

“Secondary impacts” or “indirect effects” from the proposed action are defined by Title 11, Chapter 200.1, HAR as:

*An effect that is caused by the action and is later in time or farther removed in distance, but is still reasonably foreseeable.*

The context for analyzing cumulative and secondary impacts is defined by actions within the “reasonably foreseeable future”.

It is noted that the Project District is adjacent to two (2) other planned developments: LT's Keahuolū Land Plan, which will be developed on approximately 546 acres of land to the north, and redevelopment of the County's Kailua Park. Despite its close proximity, the Keahuolū Land Plan is a separate and distinct project from the Makalapua Project District. It is on a different development schedule, with construction anticipated to begin after the development of the Project District has been initiated and additional required entitlements obtained. The Makalapua Project District is not a phase of or necessary precedent for the Keahuolū Land Plan, nor does the Project District represent a commitment to a larger action. The Keahuolū Land Plan will utilize LT-owned lands from Queen Ka'ahumanu Highway up to the Ane Keohokālole Highway. The Keahuolū Land Plan extends from Palani Road in the south to the former Kealakehe Landfill and Transfer Station in the north. The Keahuolū Land Plan is envisioned as a mixed use development that will include residential, educational facilities, commercial, civic/recreational facilities, and park and open space areas. An Environmental Impact Statement will be prepared for the Keahuolū Land Plan project.

In addition to the Keahuolū Land Plan, redevelopment of the County's Kailua Park, south of the Makalapua Project District, is anticipated to move forward within the reasonably foreseeable future. The County's 20+ year master plan for Kailua Park calls for a wide range of improvements, such as additional restrooms and lockers, concessions, canoe halau, youth and senior centers, 25-yard swimming pool, skate park, shared-use pedestrian and bicycle path, new access roads and parking, and additional lawn and landscaped areas. The old airport runway is proposed to be removed and replaced with a new beach access road with parking. A Final Environmental Assessment and Finding of No Significant Impact for the Kailua Park Master Plan was published in the February 23,



2011 Office of Environmental Quality Control's Environmental Notice. LT will coordinate with the County of Hawai'i Department of Parks and Recreation to ensure that development of the Makalapua Project District is complementary to the neighboring Kailua Park. Kuakini Highway will continue to provide access to Kailua Park via three (3) access routes.

Other future projects in the surrounding area include Kamakana Villages at Keahuolū and the La'i'Ōpua Community Center in Kealakehe, which are planned adjacent to the Keahuolū Land Plan to the north and northwest (respectively). Kamakana Villages is a master planned community on 272 acres proposed by the State's Housing Finance and Development Corporation. It includes the development of up to 2,330 homes, school facilities, and a neighborhood center, over the next 20 years. The La'i'Ōpua Community Center is part of the La'i'Ōpua Master Plan proposed by the Department of Hawaiian Home Lands (DHHL). It is planned on a 26.5-acre parcel immediately south of Kealakehe High School and will include a pre-school, community center, medical clinic, and other social and community service facilities.

The Hawai'i County General Plan and Kona Community Development Plan (KCDP) define the parameters for growth in the reasonably foreseeable future. As will be discussed further in Chapter III, the Makalapua Project District is designated for Industrial and Urban Expansion uses by the Land Use Pattern Allocation Guide (LUPAG) while the KCDP identifies the area as a "Regional Commercial Center", which is intended to organize and intensify new development (both in form and density) to support transit when it becomes available. In this context, the proposed Makalapua Project District is consistent with the growth and development that is envisioned for the region.

The cumulative impacts of the Makalapua Project District, together with other reasonably foreseeable actions, will likely include increased population and greater demands on public infrastructure. While the Makalapua Project District will provide new residential units and commercial development in the area, it is noted that the project serves to accommodate projected population growth in the County, which is anticipated to occur with or without the project. However, LT will continue to coordinate with local utilities and agencies to ensure that any potential impacts to public infrastructure and facilities resulting from the project are appropriately mitigated.

LT will provide necessary backbone infrastructure to serve the Makalapua Project District development. Drainage, wastewater, water, and roadway improvements will be designed to meet applicable local, State, and Federal regulations. The Infrastructure Report prepared for the Makalapua Project District assessed potential impacts and designed infrastructure systems in the context of future projected regional growth. Refer to **Appendix "B"**. As discussed previously, LT has sufficient water credits to accommodate the proposed Makalapua Project District. It is noted, however, that LT is in the process of developing a new regional water source, which will be dedicated to the County. This new

water source would provide water for the County's future water needs in the region and would provide an allocation to LT to support its planned projects in Kona. The new well source seeks to tap the deep-confined freshwater aquifer under the saltwater and basal water bodies and thus is understood to discharge far offshore into deeper waters is not anticipated to impact near shore tidal groundwater dependent ecosystems or deepwater offshore cultural practices (Attias E., Thomas D., Sherman D., Ismail K., 2020). It is noted that the new well, which is a separate and distinct action from the Makalapua Project District, will undergo review through the preparation of an EA and applicable permitting applications prior to dedication to the DWS. The TIAR also assessed the project in the context of regional growth, including impacts from 17 other known projects, and recommended improvements to serve the proposed project. Refer to **Appendix "N"**. In addition, given the development phasing, the TIAR will be updated, as recommended, to determine the actual traffic growth and required improvements as the project progresses.

With respect to secondary impacts, the proposed Makalapua Project District will spur economic development and growth opportunities through the development of commercial, hotel, and civic uses. The proposed project will also provide approximately 600 housing units that will provide housing options for the current and projected increase in the resident population for the region. By proposing mixed-use development adjacent to the existing Kailua-Kona urban core and in an area designated as a Regional Commercial Center by the KCDP, the Makalapua Project District will guide growth to existing developed areas rather than promoting sprawling, greenfield development.

Another secondary impact related to the proposed Makalapua Project District is income generation for support of LT's programs to benefit orphan and destitute children in the area and throughout Hawai'i. LT manages its landholdings to provide financial support to further its core mission to serve orphan and other destitute children.



**RELATIONSHIP TO LAND  
USE PLANS, POLICIES,  
AND CONTROLS**



### III. RELATIONSHIP TO LAND USE PLANS, POLICIES, AND CONTROLS

The Makalapua Project District is consistent with State and County laws, plans, and regulations, as detailed below.

#### A. STATE LAND USE DISTRICTS

Chapter 205, Hawai'i Revised Statutes (HRS), relating to the State Land Use Commission (LUC), establishes four (4) major land use districts in which all lands in the State are placed. These districts are designated as "Urban", "Rural", "Agricultural", and "Conservation". The majority of the Makalapua Project District is designated "Urban" by LUC, with the remaining 14.96 acres designated as "Agricultural".

The 14.96-acre portion of the Makalapua Project District development is within the State "Agricultural" district, and was originally part of the land plan that the Lili'uokalani Trust (LT) prepared for a portion of its lands in 1990. The 1990 Land Plan included centers for urban activity, government, regional shopping, professional practices, a region-serving hospital, business park and light industrial area, business-serving hotel complex, a college campus for West Hawai'i, and a historic preserve area. An Environmental Impact Statement (EIS) was prepared for the 1990 Land Plan and was accepted by the LUC. The 1991 LUC Decision and Order (Docket No. A89-646) reclassified the lands from the State "Conservation" and "Agricultural" districts to the "Urban" district. LT's lands between Queen Ka'ahumanu Highway and Ane Keohokālole Highway were reclassified to the "Urban" district for two (2) phases of development (Phase I and Phase II), while 212 acres (Phase III, located makai of the highway) of "Agricultural" land were made subject to incremental districting pursuant to HAR 15-15-78. Refer to **Figure 3**.

Due to changing market conditions, while LT has been able to substantially commence development within Phase I, LT has not been able to substantially complete development of Phase I and Phase II of the 1990 Land Plan despite its best efforts. During the years following the 1991 LUC Decision and Order, the Makalapua Shopping Center was built in Phase I, and now houses Macy's and formerly Kmart and Regal Cinemas as tenants. Since then, however, the real estate market slowed and LT's original plans for development were no longer economically feasible. It was also discovered that the significant slopes on the Phase I and Phase II parcels were better suited for smaller footprint uses such as residential development.

Since its initial petition, LT has revised its Land Plan for Keahuolū to better fit the needs of the community. The new Keahuolū Land Plan includes a broad range of mixed-housing choices that will appeal to different age groups and levels of affordability. Because Phase I and Phase II have not yet been substantially developed, Phase III, which includes a

portion of the Makalapua Project District area, had remained “Agricultural” subject to incremental reclassification to “Urban” under the 1991 LUC Decision and Order. In August 2015, LT submitted a motion to amend the 1991 LUC Decision and Order to remove Phase III from the Decision and Order to file a new District Boundary Amendment (DBA) Petition based on the new land plan. The motion also stipulated that a portion of land less than 15 acres be removed from Urban Phase III so that it could later be redistricted to “Urban” and developed as part of the future Makalapua Project District. On March 24, 2016, the LUC approved the motion to remove the Phase III lands from the 1991 LUC Decision and Order. Refer to **Appendix “A”**. One of the conditions of the LUC’s motion was that LT comply with recommendations made by the State Department of Transportation. The TIAR prepared for the Makalapua Project District is consistent with those recommendations and has recommended road improvements to mitigate the project’s impact on roadways. Additional pro-rata shares of these mitigation measures are included. Additionally, Finding of Fact No. 27 from the Decision and Order of the modification includes testimony from LT that it would not develop the remainder of the Urban Phase III lands without obtaining prior approval of the LUC and that LT would not seek to redistrict other portions of Urban Phase III in less than 15-acre increments, except for the portion to be included in the Makalapua Project District project.

As a result of the LUC approval of the motion to amend, the 14.96-acre portion of Phase III lands remains in the State “Agricultural” district, is no longer subject to incremental redistricting, and has been incorporated into the proposed Makalapua Project District development. LT will be seeking a DBA to move these 14.96 acres to the “Urban” District. The DBA and other permits will be processed through the County of Hawai‘i. A breakdown of the proposed land uses within the 14.96-acre area is presented in **Table 10** below.

**Table 10.** Breakdown of Land Uses within 14.96-Acre Area

<b>Land Use Program</b>	<b>Acreage</b>
Multi-Family Residential	2.12
Single-Family Residential	10.02
Commercial	0.64
Archaeological Site	1.69
Roadway (Ma’a Way)	0.49
<b>SUBTOTAL</b>	<b>14.96</b>

**1. Land Use Commission Decision Making Criteria**

As discussed below, the proposed Makalapua Project District has been analyzed in this Environmental Assessment (EA) with respect to LUC decision-making criteria, established in Section 205-17, HRS:

- (1) ***The extent to which the proposed reclassification conforms to the applicable goals, objectives, and policies of the Hawai'i state plan and relates to the applicable priority guidelines of the Hawai'i state plan and the adopted functional plans;***

**Analysis:**

The Makalapua Project District's conformance with applicable goals, objectives, and policies of the Hawai'i State Plan and Functional Plans is detailed in Chapter III, Section B and Section C, respectively.

- (2) ***The extent to which the proposed reclassification conforms to the applicable district standards;***

**Analysis:**

The extent to which the proposed reclassification conforms to the applicable standards for the Urban District is discussed below in Section A.3 of this Chapter.

- (3) ***The impact of the proposed reclassification on the following areas of state concern:***

- (a) ***Preservation or maintenance of important natural systems or habitats;***

**Analysis:**

There is no critical habitat in the vicinity of the proposed project. A Flora and Fauna Survey was conducted for the proposed project in June 2023. Refer to **Appendix "C"**. No endangered or threatened plant or animal species were observed during the survey. The report concluded that the dry lava environment was not found to include any special habitats for plant or animal species or ecosystems, with the exception of several endemic, vulnerable maiapilo bushes. The report suggested that LT include preservation of maiapilo in the project. In addition, the State of Hawai'i, Department of Land and Natural Resources, Division of Forestry and Wildlife also provided several recommendations to avoid impacts to State listed and endemic species known to frequent the area. With these recommendations addressed, the proposed project is not expected to result in any significant negative impacts on native plant communities. Discussion of the site's natural systems and habitats is presented in Chapter II of this EA.

- (b) ***Maintenance of valued cultural, historical, or natural resources;***

**Analysis:**

A Supplemental Archaeological Inventory Survey (AIS) was conducted over the 110-acre Kona Commons project area, including the majority of the 69.5-acre Makalapua Project District area, and was accepted by the State Historic Preservation Division (SHPD) in August 2015. Refer to **Appendix “D”** and **Appendix “D-1”**. Additionally, an AIS was prepared for LT’s Urban Phase III lands, which includes the 14.96 acres proposed for urbanization, and was accepted by the SHPD in September 2019. Refer to **Appendix “E”** and **Appendix “E-1”**.

Consistent with recommendations from the Supplemental AIS, a Data Recovery Plan was prepared and data recovery investigations were conducted for Site No. 50-10-27-30210, Feature B lava excavation in May 2023. An End-of-Fieldwork Letter Report was prepared and submitted to the SHPD, and the SHPD accepted said report in October 2023. A Data Recovery Report has also been prepared and submitted to the SHPD and is currently under review. A Burial Treatment Plan was also prepared for the burial site that was discovered in a modified lava tube (Site No. 50-10-27-18511, Feature C) in the Supplemental AIS. The Burial Treatment Plan was prepared in accordance with the requirements of HAR 13.13.300, Rules of Practice and Procedure Relating to Burial Sites and Human Remains, and was submitted to SHPD and the Hawai’i Island Burial Council for review and determination and approved on November 08, 2019. A Historic Preservation Plan was prepared for the portion of the historic trail that likely connected the Mamalahoa Trail with a shoreline trail (Site No. 50-10-27-30287), modified lava sinks (Site No. 50-10-27-13260) and possible ceremonial structure (Site No. 50-10-27-13261). The Historic Preservation Plan was prepared in accordance with the requirements of HAR 13.13.277, Rules Governing Requirements for Archaeological Site Preservation and Development, and was accepted by the SHPD on March 06, 2023. Additionally, LT prepared an Archaeological Monitoring Plan (AMP) for the entire Makalapua Project District. The AMP was approved by the SHPD on February 24, 2023.

Further discussion of the preservation of valued cultural, historical, and natural resources is provided in Chapter II, Section A.

- (c) ***Maintenance of other natural resources relevant to Hawai’i’s economy, including agricultural resources;***

**Analysis:**

The Makalapua Project District area does not have a recent history of agricultural use and is not currently being utilized for active agricultural cultivation. As discussed in Chapter II, Section A, the Project District area is not classified within

the Agricultural Lands of Importance to the State of Hawai'i (ALISH) system. Portions of the Project District are designated as "E" by the Land Study Bureau (LSB), representing the lowest agricultural productivity rating, while the remainder of the area is designated "Urban" by the State Land Use Commission (LUC) and is not classified by the LSB. As such, the proposed development is not anticipated to have a significant adverse impact on agricultural resources within the State of Hawai'i.

**(d) Commitment of state funds and resources;**

**Analysis:**

The proposed Makalapua Project District does not represent a commitment of State funds and resources.

**(e) Provision for employment opportunities and economic development; and**

**Analysis:**

The development of the Makalapua Project District will generate short-term economic benefits in the form of construction-related spending and employment. From a long-term perspective, commercial and hotel uses within the Project District will also support new employment. An Economic and Fiscal Impact report was prepared for the proposed project, and is summarized in Chapter II, Section B.3 of this EA. Refer to **Appendix "M"**.

**(f) Provision for housing opportunities for all income groups, particularly the low, low-moderate, and gap groups;**

**Analysis:**

The proposed Makalapua Project District will include approximately 600 residential units. Residential products will be designed to meet the needs of a variety of new and existing households, with the primary objective of creating a rich diversity of residents by providing a wide range of choices. These will include medium- to high-density residential units in single-family and multi-family formats for sale with the possibility of rentals.

**(4) The standards and criteria for the reclassification or rezoning of important agricultural lands in section 205-50; and**



**Analysis:**

The lands proposed for reclassification do not include important agricultural lands as defined under Chapter 205, HRS.

- (5) ***The representations and commitments made by the petitioner in securing a boundary change.***

**Analysis:**

LT is committed to following through with the representations and commitments made for the Makalapua Project District. It is noted that LT has been engaged in planning efforts for the Makalapua Project District lands for a number of years and there were previous land use concepts presented and assessed. In particular, a Final Environmental Assessment (EA) was published on April 23, 2019 for a version of the Makalapua Project District which featured a larger commercial use component and fewer residential units. However, since that time, LT has reassessed its goals for the Makalapua Project District and developed the currently proposed development program, which prioritizes residential uses to meet the housing needs of the West Hawai'i community as well as responds to market conditions by taking into account updated market analyses. The increase in residential units in this iteration of the plan will provide more housing opportunities for community members looking to live closer to an urban setting and employment center.

**2. Decision Making Criteria for State Land Use District Boundary Amendments**

As discussed below, the proposed project has also been analyzed with respect to decision-making criteria for boundary amendments, as established by Chapter 15-15-77, HAR.

- (1) ***The extent to which the proposed reclassification conforms to the applicable goals, objectives, and policies of the Hawai'i state plan and relates to the applicable priority guidelines of the Hawai'i state plan and the adopted functional plans;***

**Analysis:**

The Makalapua Project District's conformance with applicable goals, objectives, and policies of the Hawai'i State Plan and Functional Plans are detailed in Chapter III, Section B.

- (2) ***The extent to which the proposed reclassification conforms to the applicable district standards;***

**Analysis:**

The extent to which the proposed reclassification conforms to the applicable standards for the Urban District is discussed below in Section A.3 of this Chapter.

- (3) ***The impact of the proposed reclassification on the following areas of state concern:***
- (a) ***Preservation or maintenance of important natural systems or habitats;***
  - (b) ***Maintenance of valued cultural, historical, or natural resources;***
  - (c) ***Maintenance of other natural resources relevant to Hawai'i's economy, including agricultural resources;***
  - (d) ***Commitment of state funds and resources;***
  - (e) ***Provision for employment opportunities and economic development; and***
  - (f) ***Provision for housing opportunities for all income groups, particularly the low, low-moderate, and gap groups;***

**Analysis:**

The impact of the proposed classification on the areas of State concern have been discussed above in Section A.1 of this Chapter.

- (4) ***In establishing the boundaries of the districts in each county, the commission shall give consideration to the general plan of the county in which the land is located;***

**Analysis:**

The proposed Makalapua Project District is designated "Urban Expansion" and "Industrial" by the Hawai'i County General Plan's Land Use Pattern Allocation Guide (LUPAG). Further discussion of the project's conformance to the County's General Plan is discussed in Chapter III, Section C.

- (5) ***The representations and commitments made by the petitioner in securing a boundary change, including a finding that the petitioner has the necessary economic ability to carry out the representations and commitments relating to the proposed use or development; and***

**Analysis:**

LT has the economic ability to follow through with the representations and commitments made to the LUC and community to develop the Makalapua Project District. LT's assets include real estate holdings and an investment portfolio.

**(6) *Lands in intensive agricultural use for two years prior to date of filing of a petition or lands with a high capacity for intensive agricultural use shall not be taken out of the agricultural district unless the commission finds either that the action:***

**(a) *Will not substantially impair actual or potential agricultural production in the vicinity of the subject property or in the county or State; or***

**(b) *Is reasonably necessary for urban growth.***

**Analysis:**

The proposed Makalapua Project District has not been in intensive agricultural use historically or in the past two (2) years, nor does it have a high capacity for intensive agricultural use. As such, this criterion does not apply to the lands included in the Makalapua Project District.

**3. Standards for Determining Urban District Boundaries**

Criteria considered in the reclassification of lands to "Urban" are set forth in the State Land Use Commission Rules (Chapter 15-15-18, HAR). The proposed reclassification of the approximately 14.96 acres of "Agricultural" land to "Urban" has been analyzed with respect to the criteria, as discussed below.

**(1) *It shall include lands characterized by "city-like" concentrations of people, structures, streets, urban level of services, and other related land uses.***

**Analysis:**

The proposed Makalapua Project District is located northwest of the existing Kailua-Kona village core and makai of the existing Kona Commons Shopping Center. The majority of the 69.5-acre Project District is designated "Urban" by the LUC, with the remaining 14.96 acres within the "Agricultural" District. The proposed Makalapua Project District is located adjacent to existing urban development with "city-like" concentrations of people, structures, streets, urban levels of service, and other related land uses. It will include residential, hotel, retail, commercial, office, and civic/community uses. The Makalapua Project District will be organized around

an interconnected street network where homes, businesses, and entertainment are provided to promote a diverse experience for residents and visitors.

**(2) It shall take into consideration the following specific factors:**

- a. Proximity to centers of trading and employment except where the development would generate new centers of trading and employment.**

**Analysis:**

The proposed Makalapua Project District is located adjacent to existing commercial and employment centers in Kailua-Kona. Numerous employment opportunities exist in the retail, resort, and service industries in the region and there is an abundance of retail and commercial centers adjacent and in close proximity to the lands proposed for reclassification. These include the Kona Commons Shopping Center, Makalapua Shopping Center, Kona Coast Shopping Center, Lanihau Shopping Center, and Crossroads Shopping Center. The Kona Industrial Subdivision, an area well established with a heavy concentration of population-serving enterprises, is also located east of the lands proposed for reclassification.

- b. Availability of basic services such as schools, parks, wastewater systems, solid waste disposal, drainage, water, transportation systems, public utilities, and police and fire protection.**

**Analysis:**

The proposed Makalapua Project District is located in close proximity to existing public services, such as schools, parks, police, and fire protection. The Kona District Police Station and the Kailua-Kona Fire Station are located in close proximity approximately 1.0 and 0.6 of a mile away from the Makalapua Project District, respectively. The Makalapua Project District is also located directly adjacent to Kailua Park.

Organized around an interconnected street network that considers State and County policies and best practice objectives for Complete Streets, the Makalapua Project District will accommodate a multi-modal design to support a variety of transportation options. An Infrastructure Report prepared for the proposed project indicates that the proposed improvements to sewer, water, drainage, and telecommunication systems in the vicinity should provide adequate service for development. It is anticipated that there is sufficient electrical capacity for the initial phase of the Makalapua Project District. LT will continue to coordinate with Hawaiian Electric (HE) and implement necessary onsite/offsite electrical improvements to support the full build-out of the Makalapua Project District. As

such, significant negative impacts to existing utilities are not anticipated. Refer to **Appendix “B”**.

**c. Sufficient reserve areas for foreseeable urban growth.**

**Analysis:**

The proposed Makalapua Project District will provide for opportunities for urban expansion into the future. The LUPAG designates the Project District area as “Industrial” and “Urban Expansion”. The 14.96 acres requested for urbanization are designated as “Urban Expansion” by the LUPAG.

- (3) It shall include lands with satisfactory topography, drainage, and reasonably free from the danger of any flood, tsunami, unstable soil conditions, and other adverse environmental effects.**

**Analysis:**

The Makalapua Project District area ranges in elevation from 10 feet to 40 feet above mean sea level (amsl), which is above the 3.2-foot sea level rise projection based on National Oceanic and Atmospheric Administration’s (NOAA) Sea Level Rise Mapping data. The project site has an average slope of approximately three (3) percent, which is appropriate for urban development. It is located in Flood Zone X, areas of minimal flood hazard. Refer to **Figure 8**. The Makalapua Project District is also located outside of the tsunami evacuation area. Refer to **Figure 9**. Low Impact Development (LID) techniques, such as permeable paving systems, bio-swales, and bio-filtration for stormwater management, are being considered for the proposed project.

In summary, the Makalapua Project District area, including the lands requested for urbanization, is not subject to adverse environmental effects.

- (4) Land contiguous with existing urban areas shall be given more consideration than non-contiguous land, and particularly when indicated for future urban use on state or county general plans.**

**Analysis:**

The majority of the 69.5-acre Project District is designated “Urban” by the LUC and the proposed Project District area is located northwest of the Kailua-Kona village core. It is bordered by the Kona Commons Shopping Center to the north, the existing Kona Industrial Subdivision to the east, and the County’s Kailua Park to the south and west. The Makalapua Project District area currently contains a former recreational sports facility on Makala Boulevard, a BMW car dealership on

Loloku Street, light industrial warehouses and businesses, and temporary storage and staging areas.

The Hawai'i County General Plan's LUPAG designates the 14.96 acres requested for urbanization as "Urban Expansion".

- (5) *It shall include lands in appropriate locations for new urban concentrations and shall give consideration to areas of urban growth as shown on the State and County plans.***

**Analysis:**

The Hawai'i County General Plan envisions future urban growth within the proposed Makalapua Project District. This is evidenced by the General Plan LUPAG, which designates the 14.96 acres requested for urbanization as "Urban Expansion". The remainder of the Makalapua Project District is designated as "Industrial" by the LUPAG.

The Makalapua Project District area is adjacent to and in the vicinity of existing and proposed urban land use patterns, including commercial and residential development. The lands proposed for reclassification are, therefore, located within an area suitable for new urban growth.

- (6) *It may include lands which do not conform to paragraphs (1) to (5):***

***When surrounded by or adjacent to existing urban development; and only when those lands represent a minor portion of this district.***

**Analysis:**

The proposed Makalapua Project District is in conformance with paragraphs (1) to (5) above. The project is also located adjacent to existing urban development.

- (7) *It shall not include lands, the urbanization of which will contribute toward scattered spot urban development, necessitating unreasonable investment in public infrastructure or support services.***

**Analysis:**

As noted above, the proposed Makalapua Project District would extend existing urban areas and would not contribute to scattered spot urban development, nor would it necessitate unreasonable investment in public infrastructure or support services. The location of the project area does not significantly extend service area limits for public services, and LT will provide necessary infrastructure to serve the proposed project.

- (8) *It may include lands with a general slope of twenty percent (20%) or more if the commission finds that those lands are desirable and suitable for urban purposes and that the design and construction controls, as adopted by any Federal, State, or County agency, are adequate to protect the public health, welfare and safety, and the public's interest in the aesthetic quality of the landscape.*

**Analysis:**

The slope in the Makalapua Project District, including the re-classification area, ranges from 0 percent to 12 percent, with an average slope of 3 percent, and is suitable for the planned uses. Governmental regulations will be followed to ensure the protection of public health, safety, and welfare.

**B. HAWAI'I STATE PLAN**

Chapter 226, HRS, also known as the Hawai'i State Plan, is a long-range comprehensive plan which serves as a guide for the future long-term development of the State by identifying goals, objectives, policies, and priorities, as well as implementation mechanisms. The Plan consists of three (3) parts. Part I includes the Overall Theme, Goals, Objectives, and Policies; Part II includes Planning, Coordination, and Implementation; and Part III establishes Priority Guidelines. Part II of the State Plan covers its administrative structure and implementation process.

The overall theme of the Hawai'i State Plan is governed by the following general principles.

1. Individual and family self-sufficiency
2. Social and economic mobility
3. Community or social well-being

In consonance with the foregoing principles, the Hawai'i State Plan identifies three (3) clarifying goals:

1. A strong, viable economy, characterized by stability, diversity, and growth, that enables the fulfillment of the needs and expectations of Hawai'i's present and future generations.
2. A desired physical environment, characterized by beauty, cleanliness, quiet, stable natural systems, and uniqueness, that enhances the mental and physical well-being of the people.
3. Physical, social, and economic well-being, for individuals and families in Hawai'i, that nourishes a sense of community responsibility, of caring, and of participation in community life.

This section of the environmental assessment examines the applicability of the proposed action as it relates to the objectives, policies, and priority guidelines of the Hawai'i State Plan, as set forth in HRS Sections 226-5 through 226-27.

The table below summarizes the relationship between the proposed action and the goals of the Hawai'i State Plan. The relationship between the action and the goals are categorized into the following groups. More detailed analysis and discussion, including the methodology used, is presented in **Appendix "O"**.

1. **Directly applicable:** the action and its potential effects directly advances or promotes the objective, policy or priority guideline.
2. **Indirectly applicable:** the action and its potential effects indirectly supports or advances the objective, policy or priority guideline.
3. **Not applicable:** the action and its potential effects have no direct or indirect relationship to the objectives and policies of the Hawai'i State Plan.

In general, a proposed action's applicability to the objectives, policies and priority guidelines of the Hawai'i State Plan is judged on the basis of the action's direct or indirect relationship to the respective objectives, policies and priority directions. It is recognized that the categorization of "applicability" is subject to interpretation and should be appropriately considered in the context of local and regional conditions. The analysis presented in **Table 11** and summarized below focuses on key elements of the proposed action's relationship to the Hawai'i State Plan. Detailed discussion on the applicability of the proposed action to each goal and related objectives, policies, and implementing actions of the Hawai'i State Plan is provided in **Appendix "O"**.

**Table 11.** Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies (HRS 226-1 to 226-27)

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: DA = Directly Applicable, IA = Indirectly Applicable, NA = Not Applicable	DA	IA	NA
<b>HRS 226-1: Findings and Purpose</b>			
<b>HRS 226-2: Definitions</b>			
<b>HRS 226-3: Overall Theme</b>			
<b>HRS 226-4: State Goals.</b> In order to ensure, for the present and future generations, those elements of choice and mobility that ensure that individuals and groups may approach their desired levels of self-reliance and self determination, it shall be the goal of the State to achieve: (1) A strong, viable economy, characterized by stability, diversity, and growth, that enables the fulfillment of the needs and expectations of Hawaii's present and future generations. (2) A desired physical environment, characterized by beauty, cleanliness, quiet, stable natural systems, and uniqueness, that enhances the mental and physical well-being of the people.			



Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: DA = Directly Applicable, IA = Indirectly Applicable, NA = Not Applicable	DA	IA	NA
(3) Physical, social, and economic well-being, for individuals and families in Hawaii, that nourishes a sense of community responsibility, of caring, and of participation in community life.			
<b>Chapter 226-5 Objective and Policies for Population</b>			
<b>Objective:</b>			
(a) It shall be the objective in planning for the State's population to guide population growth to be consistent with the achievement of physical, economic and social objectives contained in this chapter.	✓		
<b>Chapter 226-6 Objectives and policies for the economy – – in general</b>			
<b>Objectives:</b>			
(a) Planning for the State's economy in general shall be directed toward achievement of the following objectives:			
(1) Increased and diversified employment opportunities to achieve full employment, increased income and job choice, and improved living standards for Hawaii's people, while at the same time stimulating the development and expansion of economic activities capitalizing on defense, dual-use, and science and technology assets, particularly on the neighbor islands where employment opportunities may be limited.	✓		
(2) A steadily growing and diversified economic base that is not overly dependent on a few industries, and includes the development and expansion of industries on the neighbor islands.	✓		
<b>Chapter 226-7 Objectives and policies for the economy – – agriculture.</b>			
<b>Objectives:</b>			
(a) Planning for the State's economy with regard to agriculture shall be directed towards achievement of the following objectives:			
(1) Viability of Hawaii's sugar and pineapple industries.			✓
(2) Growth and development of diversified agriculture throughout the State.			✓
(3) An agriculture industry that continues to constitute a dynamic and essential component of Hawaii's strategic, economic, and social well-being.			✓
<b>Chapter 226-8 Objective and policies for the economy – – visitor industry.</b>			
<b>Objective:</b>			
(a) Planning for the State's economy with regard to the visitor industry shall be directed towards the achievement of the objective of a visitor industry that constitutes a major component of steady growth for Hawaii's economy.	✓		
<b>Chapter 226-9 Objective and policies for the economy – – federal expenditures.</b>			
<b>Objective:</b>			
(a) Planning for the State's economy with regard to federal expenditures shall be directed towards achievement of the objective of a stable federal investment base as an integral component of Hawaii's economy.			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: DA = Directly Applicable, IA = Indirectly Applicable, NA = Not Applicable	DA	IA	NA
<b>Chapter 226-10 Objective and policies for the economy – – potential growth and innovative activities.</b>			
<b><u>Objective:</u></b>			
(a) Planning for the State's economy with regard to potential growth and innovative activities shall be directed towards achievement of the objective of development and expansion of potential growth and innovative activities that serve to increase and diversify Hawaii's economic base.		✓	
<b>Chapter 226-10.5 Objectives and policies for the economy – – information industry.</b>			
<b><u>Objective:</u></b>			
(a) Planning for the State's economy with regard to telecommunications and information technology shall be directed toward recognizing that broadband and wireless communication capability and infrastructure are foundations for an innovative economy and positioning Hawaii as a leader in broadband and wireless communications and applications in the Pacific Region.			✓
<b>Chapter 226-11 Objectives and policies for the physical environment – – land based, shoreline, and marine resources.</b>			
<b><u>Objectives:</u></b>			
(a) Planning for the State's physical environment with regard to land-based, shoreline, and marine resources shall be directed towards achievement of the following objectives:			
(1) Prudent use of Hawaii's land-based, shoreline, and marine resources.	✓		
(2) Effective protection of Hawaii's unique and fragile environmental resources.	✓		
<b>Chapter 226-12 Objective and policies for the physical environment – – scenic, natural beauty, and historic resources.</b>			
<b><u>Objective:</u></b>			
(a) Planning for the State's physical environment shall be directed towards achievement of the objective of enhancement of Hawaii's scenic assets, natural beauty, and multi-cultural/historical resources.	✓		
<b>Chapter 226-13 Objectives and policies for the physical environment – – land, air, and water quality.</b>			
<b><u>Objectives:</u></b>			
(a) Planning for the State's physical environment with regard to land, air, and water quality shall be directed towards achievement of the following objectives.			
(1) Maintenance and pursuit of improved quality in Hawaii's land, air, and water resources.	✓		
(2) Greater public awareness and appreciation of Hawaii's environmental resources.			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: DA = Directly Applicable, IA = Indirectly Applicable, NA = Not Applicable	DA	IA	NA
<b>Chapter 226-14 Objective and policies for facility systems – – in general.</b>			
<b><u>Objective:</u></b>			
(a) Planning for the State's facility systems in general shall be directed towards achievement of the objective of water, transportation, sustainable development, climate change adaptation, sea level rise adaptation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives.	✓		
<b>Chapter 226-15 Objectives and policies for facility systems – – solid and liquid waste.</b>			
<b><u>Objectives:</u></b>			
(a) Planning for the State's facility systems with regard to solid and liquid wastes shall be directed towards the achievement of the following objectives			
(1) Maintenance of basic public health and sanitation standards relating to treatment and disposal of solid and liquid wastes.	✓		
(2) Provision of adequate sewerage facilities for physical and economic activities that alleviate problems in housing, employment, mobility, and other areas.			✓
<b>Chapter 226-16 Objective and policies for facility systems – – water.</b>			
<b><u>Objective:</u></b>			
(a) Planning for the State's facility systems with regard to water shall be directed towards achievement of the objective of the provision of water to adequately accommodate domestic, agricultural, commercial, industrial, recreational, and other needs within resource capacities.	✓		
<b>Chapter 226-17 Objectives and policies for facility systems – – transportation.</b>			
<b><u>Objectives:</u></b>			
(a) Planning for the State's facility systems with regard to transportation shall be directed towards the achievement of the following objectives:			
(1) An integrated multi-modal transportation system that services statewide needs and promotes the efficient, economical, safe, and convenient movement of people and goods.	✓		
(2) A statewide transportation system that is consistent with and will accommodate planned growth objectives throughout the State.			✓
<b>Chapter 226-18 Objectives and policies for facility systems – – energy.</b>			
<b><u>Objectives:</u></b>			
(a) Planning for the State's facility systems with regard to energy shall be directed toward the achievement of the following objectives, giving due consideration to all:			
(1) Dependable, efficient, and economical statewide energy systems capable of supporting the needs of the people;			✓
(2) Increased energy security and self-sufficiency through the reduction and ultimate elimination of Hawaii's dependence on imported fuels for electrical generation and ground transportation.			✓
(3) Greater diversification of energy generation in the face of threats to Hawaii's energy supplies and systems;			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: DA = Directly Applicable, IA = Indirectly Applicable, NA = Not Applicable	DA	IA	NA
(4) Reduction, avoidance, or sequestration of greenhouse gas emissions from energy supply and use; and	✓		
(5) Utility models that make the social and financial interests of Hawaii's utility customers a priority.			✓
<b>Chapter 226-18.5 Objectives and policies for facility systems – – telecommunications.</b>			
<b><u>Objective:</u></b>			
(a) Planning for the State's telecommunications facility systems shall be directed towards the achievement of dependable, efficient, and economical statewide telecommunications systems capable of supporting the needs of the people.			✓
<b>Chapter 226-19 Objectives and policies for socio-cultural advancement – – housing.</b>			
<b><u>Objectives:</u></b>			
(a) Planning for the State's socio-cultural advancement with regard to housing shall be directed toward the achievement of the following objectives:			
(1) Greater opportunities for Hawaii's people to secure reasonably priced, safe, sanitary, and livable homes, located in suitable environments that satisfactorily accommodate the needs and desires of families and individuals, through collaboration and cooperation between government and nonprofit and for-profit developers to ensure that more affordable housing is made available to very low-, low- and moderate-income segments of Hawaii's population.	✓		
(2) The orderly development of residential areas sensitive to community needs and other land uses.	✓		
(3) The development and provision of affordable rental housing by the State to meet the housing needs of Hawaii's people.			✓
<b>Chapter 226-20 Objectives and policies for socio-cultural advancement – – health.</b>			
<b><u>Objectives:</u></b>			
(a) Planning for the State's socio-cultural advancement with regard to health shall be directed towards achievement of the following objectives:			
(1) Fulfillment of basic individual health needs of the general public.			✓
(2) Maintenance of sanitary and environmentally healthful conditions in Hawaii's communities.			✓
(3) Elimination of health disparities by identifying and addressing social determinants of health.			✓
<b>Chapter 226-21 Objectives and policies for Socio-cultural advancement – – education.</b>			
<b><u>Objective:</u></b>			
(a) Planning for the State's socio-cultural advancement with regard to education shall be directed towards achievement of the objective of the provision of a variety of educational opportunities to enable individuals to fulfill their needs, responsibilities, and aspirations.			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: DA = Directly Applicable, IA = Indirectly Applicable, NA = Not Applicable	DA	IA	NA
<b>Chapter 226-22 Objective and policies for socio-cultural advancement – – social services.</b>			
<b><u>Objective:</u></b>			
(a) Planning for the State's socio-cultural advancement with regard to social services shall be directed towards the achievement of the objective of improved public and private social services and activities that enable individuals, families, and groups to become more self-reliant and confident to improve their well-being.			✓
<b>Chapter 226-23 Objective and policies for socio-cultural advancement – – leisure.</b>			
<b><u>Objective:</u></b>			
(a) Planning for the State's socio-cultural advancement with regard to leisure shall be directed towards the achievement of the objective of the adequate provision of resources to accommodate diverse cultural, artistic, and recreational needs for present and future generations.	✓		
<b>Chapter 226-24 Objective and policies for socio-cultural advancement – – individual rights and personal well-being.</b>			
<b><u>Objective:</u></b>			
(a) Planning for the State's socio-cultural advancement with regard to individual rights and personal well-being shall be directed towards achievement of the objective of increased opportunities and protection of individual rights to enable individuals to fulfill their socio-economic needs and aspirations.			✓
<b>Chapter 226-25 Objective and policies for socio-cultural advancement – – culture.</b>			
<b><u>Objective:</u></b>			
(a) Planning for the State's socio-cultural advancement with regard to culture shall be directed toward the achievement of the objective of enhancement of cultural identities, traditions, values, customs, and arts of Hawaii's people.	✓		
<b>Chapter 226-26 Objectives and policies for socio-cultural advancement – – public safety.</b>			
<b><u>Objectives:</u></b>			
(a) Planning for the State's socio-cultural advancement with regard to public safety shall be directed towards the achievement of the following objectives:			
(1) Assurance of public safety and adequate protection of life and property for all people.			✓
(2) Optimum organizational readiness and capability in all phases of emergency management to maintain the strength, resources, and social and economic well-being of the community in the event of civil disruptions, wars, natural disasters, and other major disturbances.			✓
(3) Promotion of a sense of community responsibility for the welfare and safety of Hawaii's people.			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: DA = Directly Applicable, IA = Indirectly Applicable, NA = Not Applicable	DA	IA	NA
<b>Chapter 226-27 Objectives and policies for socio-cultural advancement – – government.</b>			
<b>Objectives:</b>			
(a) Planning the State's socio-cultural advancement with regard to government shall be directed towards the achievement of the following objectives:			
(1) Efficient, effective, and responsive government services at all levels in the State.			✓
(2) Fiscal integrity, responsibility, and efficiency in the state government and county governments.			✓

The Makalapua Project District will include approximately 600 new residential units, 150 hotel rooms, and 220,900 square feet of commercial use which may include grocery, office, retail, civic/community, and food and beverage uses. The components are designed to provide much needed housing, economic growth opportunities, and visitor amenities to an urban infill location, while fostering a sense of community. The proposed project, thus, directly supports the State goals related to housing, efficient land use, the economy, and the visitor industry.

In addition, the Makalapua Project District is designed with the surrounding natural and historic resources in mind. For example, the project will not be at risk of coastal hazards or have significant adverse effects on fragile ecosystems. Best Management Practices (BMPs) will be implemented to mitigate potential impacts to the natural environment, both during and after construction. The project site also includes three (3) historic preservation sites that will be marked with signage to increase awareness of and appreciation for these sites of historic significance. Open spaces will also be incorporated throughout the Project District. The project is, thus, supportive of environmental and cultural goals as well.

**Priority Guidelines**

“Priority guidelines” means those guidelines which shall take precedence when addressing areas of statewide concern. This section addresses applicability criteria to the priority guidelines set forth in HRS 226-103.

Priority guidelines of the Hawai'i State Plan covers the economy, population growth and land resources, crime and criminal justice, affordable housing, quality education, sustainability, and climate change adaptation.

The **Table 12** below summarizes the relationship between the proposed action and the priority guidelines of the Hawai'i State Plan. More detailed discussion is presented in **Appendix “O”**.

**Table 12.** Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies (Chapters 226-101 to 226-109)

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: DA = Directly Applicable, IA = Indirectly Applicable, NA = Not Applicable	DA	IA	N/A
<b>Chapter 226-101: Purpose.</b> The purpose of this part is to establish overall priority guidelines to address areas of statewide concern.			
<b>Chapter 226-102: Overall direction.</b> The State shall strive to improve the quality of life for Hawaii's present and future population through the pursuit of desirable courses of action in seven major areas of statewide concern which merit priority attention: economic development, population growth and land resource management, affordable housing, crime and criminal justice, quality education, principles of sustainability, and climate change adaptation.			
<b>Chapter 226-103: Economic priority guidelines.</b>			
(a) Priority guidelines to stimulate economic growth and encourage business expansion and development to provide needed jobs for Hawaii's people and achieve a stable and diversified economy	✓		
(b) Priority guidelines to promote the economic health and quality of the visitor industry	✓		
(c) Priority guidelines to promote the continued viability of the sugar and pineapple industries			✓
(d) Priority guidelines to promote the growth and development of diversified agriculture and aquaculture			✓
(e) Priority guidelines for water use and development			✓
(f) Priority guidelines for energy use and development			✓
(g) Priority guidelines to promote the development of the information industry			✓
<b>Chapter 226-104: Population growth and land resources priority guidelines.</b>			
(a) Priority guidelines to effect desired statewide growth and distribution			✓
(b) Priority guidelines for regional growth distribution and land resource utilization	✓		
<b>Chapter 226-105: Crime and criminal justice.</b>			
Priority guidelines in the area of crime and criminal justice			✓
<b>Chapter 226-106: Affordable housing.</b>			
Priority guidelines for the provision of affordable housing	✓		
<b>Chapter 226-107: Quality education.</b>			
Priority guidelines to promote quality education			✓
<b>CHAPTER 226-108: Sustainability</b>			
Priority guidelines and principles to promote sustainability	✓		
<b>CHAPTER 226-109: Climate change adaptation priority guidelines</b>			
Priority guidelines to prepare the State to address the impacts of climate change, including impacts to the areas of agriculture; conservation lands; coastal and nearshore marine areas; natural and cultural resources; education; energy; higher education; health; historic preservation; water resources; the built environment, such as housing, recreation, transportation; and the economy shall:	✓		

The Makalapua Project District will provide opportunities for housing, economic development, hotel, and community uses in a convenient location adjacent to Kailua Village, and away from critical habitats or ecosystems. The climate, environment, and

special character of Kona will be considered and factored in to the design concepts for the project, and the necessary infrastructure to support the project is included in its scope. The project is, therefore, supportive of the priority guidelines regarding the economy, visitor industry, and land use. In addition, the project will supply a variety of housing options to accommodate households from a range of income levels.

The Makalapua Project District is also consistent with the above-noted priority guidelines and principles related to sustainability. Passive energy conservation and sustainability strategies are being considered for the project, such as design techniques related to stormwater management and thoughtful building orientation and fenestration to bolster natural ventilation. The project has been sited to avoid impacts due to coastal hazards such as sea level rise and flooding. Core principles for the project include fulfilling the legacy of Queen Lili'uokalani, fostering regional economic resilience, improving regional transportation, instilling diversity, and demonstrating mālama for our resources.

### **C. STATE FUNCTIONAL PLAN**

A key element of the Statewide Planning System is the Functional Plans which set forth the policies, statewide guidelines, and priorities within a specific field of activity. There are 13 Functional Plans which have been developed by the State agency primarily responsible for a given functional area. Together with the County General Plans, the State Functional Plans establish more specific strategies for implementation. In particular, State Functional Plans provide for the following:

- Identify major Statewide priority concerns
- Define current strategies for each functional area
- Identify major relationships among functional areas
- Provide direction and strategies for departmental policies, programs, and priorities
- Provide a guide for the allocation of resources
- Coordinate State and County roles and responsibilities in the implementation of the Hawai'i State Plan

Thirteen (13) Functional Plans have been prepared by State agencies. **Table 13** provides an assessment of the relationship between the proposed action and each of the 13 Functional Plans.



**Table 13.** Relationship Between the Proposed Makalapua Project District and the State Functional Plans

State Functional Plan		State Coordinating Agency	Purpose	Analysis
1	Agriculture Functional Plan (1991)	Department of Agriculture	Continued viability of agriculture throughout the State	A portion of the Makalapua Project District is located within the State Agricultural District. The underlying soil is not conducive for productive agricultural use as described in <b>Section II.A.3.</b> of this document. Furthermore, archaeological documentations have shown that there is limited history of agriculture usage in the project area. A District Boundary Amendment application will be processed to amend the portion of the Makalapua Project District from the State Agricultural District to Urban District.
2	Conservation Lands State Functional Plan (1991)	Department of Land and Natural Resources	Addresses issues of population and economic growth and its strain on current natural resources; broadening public use of natural resources while protecting lands and shorelines from overuse; additionally, promotes the aquaculture industry	Not Applicable.
3	Education State Functional Plan (1989)	Department of Education	Improvements to Hawai'i's educational curriculum, quality of educational staff, and access to adequate facilities	Not Applicable.

State Functional Plan		State Coordinating Agency	Purpose	Analysis
4	Employment State Functional Plan (1990)	Department of Labor and Industrial Relations	Improve the qualifications, productivity, and effectiveness of the State's workforce through better education and training of workers as well as efficient planning of economic development, employment opportunities, and training activities	The proposed project will have beneficial short-term and long-term impacts on employment. In the short-term, construction jobs will be created and those workers will spend money locally. Long-term impacts will come from additional jobs being created to operate commercial uses and hotels within the proposed Project District. The proposed 600 residential units will allow for residents working in the North Kona region to live closer to work helping to stabilize the North Kona work force.
5	Energy State Functional Plan (1991)	Department of Business, Economic Development and Tourism	Lessen the reliance on petroleum and other fossil fuels in favor of alternative sources of energy so as to keep up with the State's increasing energy demands while also becoming a more sustainable island state; achieving dependable, efficient, and economical statewide energy systems	The project proposes to implement various sustainability measures in support of the State's energy objectives.
6	Health State Functional Plan (1989)	Department of Health	Improve health care system by providing for those who don't have access to private health care providers; increasing preventative health measures; addressing 'quality of care' elements in private and public sectors to cut increasing costs	Not Applicable.
7	Higher Education Functional Plan (1984)	University of Hawai'i	Prepare Hawai'i's citizens for the demands of an increasingly complex world through providing technical and intellectual tools	Not Applicable.

State Functional Plan		State Coordinating Agency	Purpose	Analysis
8	Historic Preservation State Functional Plan (1991)	Department of Land and Natural Resources	Preservation of historic properties, records, artifacts and oral histories; provide public with information/education on the ethnic and cultural heritages and history of Hawai'i	Two (2) Archaeological Inventory Surveys were conducted on the proposed Project District. The SHPD has been consulted and various mitigation measures have been and will be implemented, including data recovery, burial treatment, and preservation of significant historic sites, and archaeological monitoring.
9	Housing State Functional Plan (2017)	Hawai'i Housing Finance and Development Corporation	Based largely on joint public/private efforts to finance, build, and maintain an adequate supply of affordable housing. It will be a working tool to guide the State, the counties, as well as the private sector in meeting the overall goal that every Hawaii resident will have the opportunity to live in a safe, decent and affordable home.	The proposed Project District will create approximately 600 housing units and will meet the County of Hawai'i's affordable housing requirements. As such, the project supports the overall objectives of the Housing State Functional Plan.
10	Human Services State Functional Plan (1989)	Department of Human Services	Refining support systems for families and individuals by improving elderly care, increasing preventative measures to combat child/spousal abuse and neglect; providing means for 'self-sufficiency'	Not Applicable.
11	Recreation State Functional Plan (1991)	Department of Land and Natural Resources	Manage the use of recreational resources via addressing issues: (1) ocean and shoreline recreation, (2) mauka, urban, and other recreation opportunities, (3) public access to shoreline and upland recreation areas, (4) resource conservation and management, (5) management of recreation programs/facilities/areas, and (6) wetlands protection and management	The proposed Project District will enhance recreational resources in Kailua-Kona. A potential realignment of Makala Boulevard may improve access to Kailua Park, contingent upon discussions with County agencies. Additionally, approximately 3.5 acres of open spaces throughout the project area will be provided for residents and visitors for urban recreation.

State Functional Plan		State Coordinating Agency	Purpose	Analysis
12	Tourism State Functional Plan (1991)	Department of Business, Economic Development and Tourism	Balance tourism/economic growth with environmental and community concerns; development that is cognizant of the limited land and water resources of the islands; maintaining friendly relations between tourists and community members; development of a productive workforce and enhancement of career and employment opportunities in the visitor industry	150 hotel rooms are proposed as part of the Makalapua Project District, along with residential and commercial uses. The growth associated with this project is deemed appropriate as the project is an infill project and the land is not productive for agricultural uses.
13	Transportation State Functional Plan (1991)	Department of Transportation	Development of a safer, more efficient transportation system that also is consistent with planned physical and economic growth of the state; construction of facility and infrastructure improvements; develop a transportation system balanced with new alternatives; pursue land use initiatives which help reduce travel demand	The design of streets within the project will accommodate space for pedestrian, bike, car, and bus traffic as may be required by County design standards to ensure that there is adequate space for all types of transportation throughout the project area. This will allow for safer commutes and help reduce travel demand.

## D. HAWAI'I 2050 SUSTAINABILITY PLAN

The Hawai'i 2050 Sustainability Plan (HSP) was created to establish a vibrant, resilient economy, a healthy quality of life grounded in a multi-ethnic culture and Kānaka Maoli values, and healthy natural resources. The plan is meant to guide decision making during the decade of action (2020-2030) to ensure that Hawai'i is climate resilient and economically, socially, and environmentally sustainable. The revised HSP serves as the State's climate and sustainability strategic action plan pursuant to HRS statutes §226-65. The HSP identifies eight (8) focus areas with 38 strategies and over 250 recommended actions that show urgent action items for the Decade of Action.

The Makalapua Project District helps achieve three (3) Focus Areas and the associated strategies as outlined in the HSP:

- i. *Reduce Greenhouse Gas Emissions* – by continuing to monitor the state's emissions and reduce greenhouse gas (GHG) emissions through strategies in the energy, transportation, agriculture and waste sectors.
  - Strategy 9 – Measure, manage, and plan for GHG emission reduction.
  - Strategy 10 – Incorporate climate change into decision making processes.
  - Strategy 11 – Promote energy conservation and efficiency through outreach, communication, community, and public engagement.
  - Strategy 14 – Promote alternative modes of transportation.

**Response:** The Makalapua Project District is being built to minimize GHG emissions related to the construction and operation phases. Design elements will help minimize negative impacts while still allowing for a functional and safe community for residents and visitors. Per the GHG report assessing the Makalapua Project District, the Makalapua Project District will not be a significant generator of GHG emissions. See **Appendix "L"**. Energy conservation measures will be incorporated into the project design, where feasible. Additionally, the Makalapua Project District is designed with complete streets in mind, accommodating vehicles while promoting bicycles and walking through the design of the project.

- ii. *Advance Sustainable Communities* – through strategies that improve land use and access to green space, advance sustainable practices in schools and encourage sustainable buildings and infrastructure.
  - Strategy 21 – Advance smart growth initiatives and multimodal transportation systems.
  - Strategy 22- Integrate sustainable design principles into new and existing buildings.

**Response:** The Makalapua Project District's interconnected street network accommodates multi-modal transportation options that consider State and County policies and best practice objectives for Complete Streets. It will support a variety of transportation options, including pedestrian, bicycle, and vehicular connectivity. The project will include 3.5 acres of open space throughout the mixed-use community. Sustainable design elements aimed at reducing electricity and water consumption are being considered for implementation in the project.

- iii. *Advance equity* – by ensuring equitable access to resources addressing
- Strategy 25 – Continue to improve economic and social sustainability of individuals through access to affordable housing.

**Response:** The proposed Makalapua Project District will include approximately 600 residential units. Residential products will be designed to meet the needs of a variety of new and existing households, with the primary objective of creating a rich diversity of residents by providing a wide range of choices. These will include medium- to high-density residential units in single-family and multi-family formats for sale with potential opportunities for rentals.

## **E. HAWAI'I COUNTY GENERAL PLAN**

The County of Hawai'i's General Plan is the policy document for the long-range comprehensive development of the island of Hawai'i. Adopted in 2005, the General Plan provides direction for future growth of the County and offers policy statements that embody expressed goals for present and future generations. The Hawai'i County General Plan is currently being updated from the 2005 version. However, as the 2005 version is the most current, the plan and purpose of the General Plan remains in line with the 2005 goals to:

- Guide the pattern of future development in this County based on long-term goals.
- Identify the visions, values, and priorities important to the people of this County.
- Provide the framework for regulatory decisions, capital improvement priorities, acquisition strategies, and other pertinent government programs within the County organization and coordinated with State and Federal programs.
- Improve the physical environment of the County as a setting for human activities; to make it more functional, beautiful, healthful, interesting, and efficient.
- Promote and safeguard the public interest and the interest of the County as a whole.
- Facilitate the democratic determination of community policies concerning the utilization of its natural, man-made, and human resources.

- Effect political and technical coordination in community improvement and development.
- Inject long-range considerations into the determination of short-range actions and implementation.

It is noted that the County of Hawai'i, Planning Department is in the process of updating the General Plan. The Hawai'i County General Plan 2045 is intended to shape the future of Hawai'i County for the next 25 years, a draft was made available for public review in Spring 2024.

## 1. **Land Use Pattern Allocation Guide**

The Land Use Element of the General Plan establishes a broad, flexible land use pattern intended to guide the future direction and quality of future development in a coordinated and rational matter. The proposed Makalapua Project District is designated as "Urban Expansion" and "Industrial" by the LUPAG Map. See **Figure 14**. However, in a letter dated October 5, 2017 providing comments on the Draft EA for the previous version of the Makalapua Project District, the Planning Department noted that the property can be interpreted to be within the "Urban Expansion" designation. "Urban Expansion Areas" are designated when the specific settlement pattern and types of uses have yet to be determined. "Urban Expansion" allows for a mix of high density, medium density, low density, industrial, industrial-commercial, and/or open designations in areas where new settlements may be desirable.

It is noted that the County of Hawai'i Planning Department is in the process of updating the Hawai'i County General Plan 2045. The LUPAG map in the draft General Plan 2045 preliminarily designates the Makalapua Project District site as "High Density Urban" and "Medium Density Urban". The proposed Makalapua Project District is consistent with the land uses envisioned in the draft LUPAG map.

The proposed Makalapua Project District is consistent with the General Plan, which envisions the project area to be developed for future urban uses. The intent of the General Plan for the project area is further translated through the Kona Community Development Plan (KCDP), which identifies the Makalapua Project District as a Transit-Oriented Development Regional Center within a designated Urban Area. A detailed assessment of the Makalapua Project District's consistency with the KCDP is included in Section "D" of this chapter.

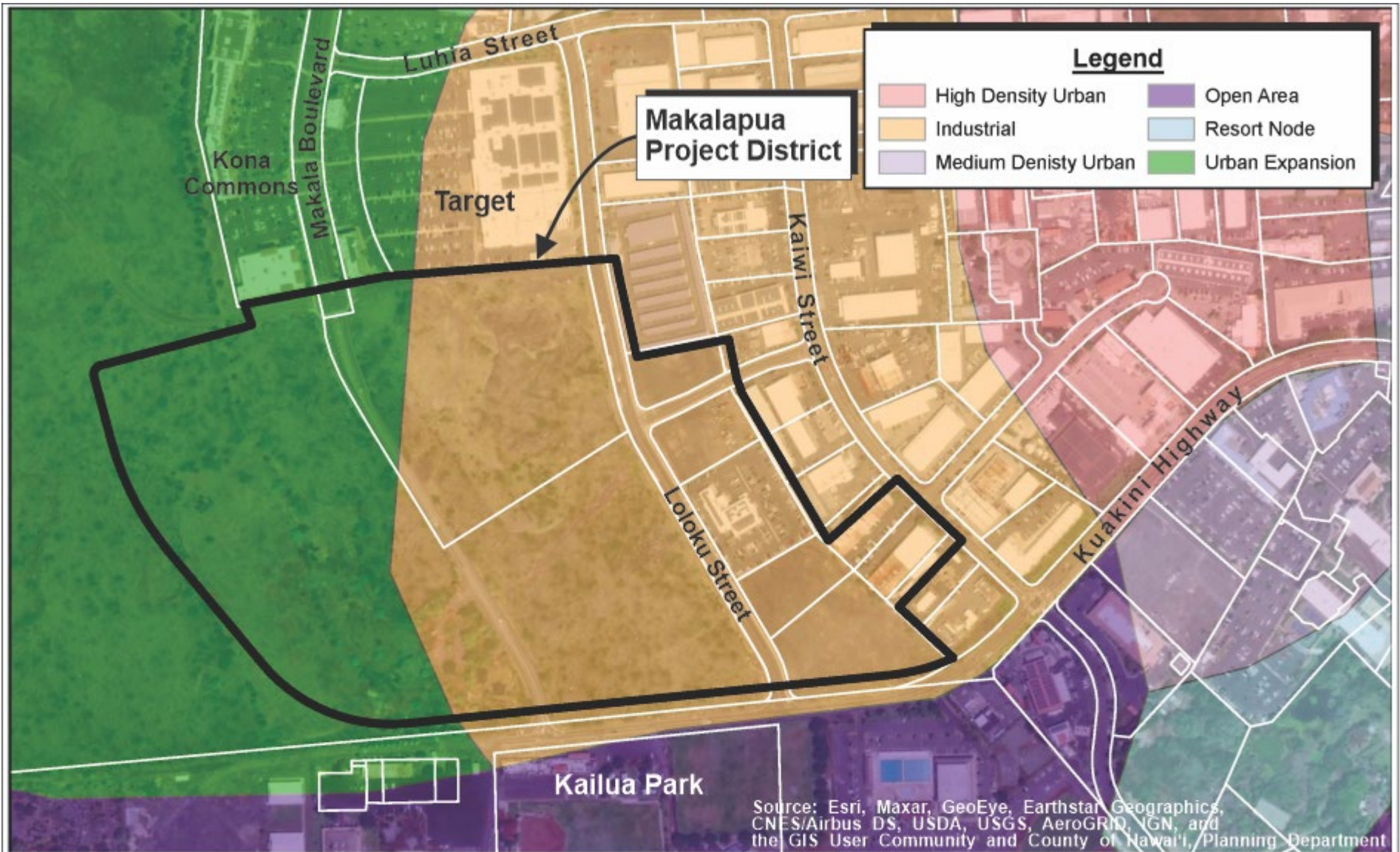


Figure 14

Makalapua Project District  
Land Use Pattern Allocation Guide



Prepared for: Lili'uokalani Trust

QLT/Makalapua PD 1875/Land Use Pattern/DEA



**2. Goals and Policies**

The following section identifies goals and policies of the Hawai'i County General Plan which have relevance to the proposed Makalapua Project District:

**ECONOMIC**

**Goals**

- (a) *Provide residents with opportunities to improve their quality of life through economic development that enhances the County's natural and social environments.*
- (b) *Economic development and improvement shall be in balance with the physical, social, and cultural environments of the island of Hawai'i.*

\* \* \*

- (d) *Provide an economic environment that allows new, expanded, or improved economic opportunities that are compatible with the County's cultural, natural, and socio environment.*
- (e) *Strive for an economic climate that provides its residents an opportunity for choice of occupation.*

**Policies**

- (c) *Encourage the development of a visitor industry that is in harmony with the social, physical, and economic goals of the residents of the County.*
- (d) *Require a study of the significant cultural, social and physical impacts of large developments prior to approval.*

\* \* \*

- (n) *Encourage the development of the retirement industry.*

**ENERGY**

**Goals**

- (b) *Establish the Big Island as a demonstration community for the development and use of natural energy resources.*

**Policies**

- (n) *Encourage energy-saving design in the construction of buildings.*

## **ENVIRONMENTAL QUALITY**

### **Goals**

- (a) *Define the most desirable use of land within the County that achieves an ecological balance providing residents and visitors the quality of life and an environment in which natural resources of the island are viable and sustainable.*
- (b) *Maintain and, if feasible, improve the existing environmental quality of the island.*
- (c) *Control pollution.*

### **Policies**

- (a) *Take positive action to further maintain the quality of the environment.*

## **FLOODING AND OTHER NATURAL HAZARDS**

### **Goals**

- (a) *Protect human life.*
- (b) *Prevent damage to man-made improvements.*
- (c) *Control pollution.*
- (d) *Prevent damage from inundation.*
- (e) *Reduce surface water and sediment runoff.*
- (f) *Maximize soil and water conservation.*

### **Policies**

- (g) *Development-generated runoff shall be disposed of in a manner acceptable to the Department of Public Works and in compliance with all State and Federal laws.*
- (q) *Consider natural hazards in all land use planning and permitting.*

## **HISTORIC SITES**

### **Goals**

- (a) *Protect, restore, and enhance the sites, buildings, and objects of significant historical and cultural importance to Hawai'i.*
- (b) *Appropriate access to significant historic sites, buildings, and objects of public interest should be made available.*

**Policies**

- (a) *Require both public and private developers of land to provide historical and archaeological surveys and cultural assessments, where appropriate, prior to the clearing or development of land when there are indications that the land under consideration has historical significance.*

**HOUSING**

**Goals**

- (a) *Attain safe, sanitary, and livable housing for the residents of the County of Hawai'i.*
- (b) *Attain a diversity of socio-economic housing mix throughout the different parts of the County.*
- (c) *Maintain a housing supply that allows a variety of choices.*
- (d) *Create viable communities with affordable housing and suitable living environments.*

\* \* \*

- (f) *Seek sufficient production of new affordable rental and fee-simple housing in the County in a variety of sizes to satisfactorily accommodate the needs and desires of families and individuals.*
- (g) *Ensure that housing is available to all persons regardless of age, sex, marital status, ethnic background, and income.*
- (h) *Make affordable housing available in reasonable proximity to employment centers.*
- (i) *Encourage and expand home ownership opportunities for residents.*

**Policies**

- (a) *Encourage a volume of construction and rehabilitation of housing sufficient to meet growth needs and correct existing deficiencies.*

\* \* \*

- (k) *Increase rental opportunities and choices in terms of quality, cost, amenity, style and size of housing, especially for low and moderate income households.*

\* \* \*

- (y) *Aid and encourage the development of a wide variety of housing to achieve a diversity of socio-economic housing mix.*

## **PUBLIC UTILITIES**

### **Goals**

- (a) *Ensure that properly regulated, adequate, efficient and dependable public and private utility services are available to users.*
- (b) *Maximize efficiency and economy in the provision of public utility services.*

### **Policies – General**

- (e) *Encourage the clustering of developments in order to reduce the cost of providing utilities.*

### **Policies – Water**

- (a) *Water system improvements shall correlate with the County's desired land use development pattern.*
- (b) *All water systems shall be designed and built to Department of Water Supply standards.*

\* \* \*

- (g) *The fire prevention systems shall be coordinated with water distribution systems in order to ensure water supplies for fire protection purposes.*
- (k) *Promote the use of ground water sources to meet State Department of Health water quality standards.*

### **Policies – Telecommunication**

- (a) *Encourage underground telephone lines where they are economically and technically feasible.*

### **Policies – Electricity**

- (a) *Power distribution shall be placed underground when and where practical. Encourage developers of new urban areas to place utilities underground.*

\* \* \*

- (d) *Conform to safety standards as established by appropriate regulatory authorities.*

### **Policies – Sewer**

- (f) *Require major developments to connect to existing sewer treatment facilities or build their own.*

## **RECREATION**

### **Goals**

- (a) *Provide a wide variety of recreational opportunities for the residents and visitors of the County.*

\* \* \*

- (c) *Provide a diversity of environments for active and passive pursuits.*

### **Policies**

- (c) *Recreational facilities shall reflect the natural, historic, and cultural character of the area.*
- (d) *The use of land adjoining recreation areas shall be compatible with community values, physical resources, and recreation potential.*

## **TRANSPORTATION**

### **Goals - General**

- (a) *Provide a transportation system whereby people and goods can move efficiently, safely, comfortably and economically.*
- (b) *Make available a variety of modes of transportation that best meets the needs of the County.*

### **Goals – Roadways**

- (a) *Provide a system of roadways for the safe, efficient and comfortable movement of people and goods.*

### **Policies – Roadways**

- (n) *Encourage the development of walkways, jogging, and bicycle paths within designated areas of the community.*

### **Goals – Mass Transit**

- (a) *Provide residents with a variety of public transportation systems that are affordable, efficient, accessible, safe, environmentally friendly, and reliable.*

### **Policies – Mass Transit**

- (b) *Support and encourage the development of alternative modes of transportation, such as enhanced bus services and bicycle paths.*

- (c) *Incorporate, where appropriate, bicycle routes, lanes and paths within road rights-of-ways in conformance with The Bike Plan for the County of Hawai'i.*

**LAND USE**

**Goals – General**

- (a) *Designate and allocate land uses in appropriate proportions and mix and in keeping with the social, cultural, and physical environments of the County.*

**Policies – General**

- (a) *Zone urban - types of uses in areas with ease of access to community services and employment centers and with adequate public utilities and facilities.*

\* \* \*

- (j) *Encourage urban development within existing zoned areas already served by basic infrastructure, or close to such areas, instead of scattered development.*

**Goals – Commercial Development**

- (a) *Provide for commercial developments that maximize convenience to users.*
- (b) *Provide commercial developments that complement the overall pattern of transportation and land usage within the island's regions, communities, and neighborhoods.*

**Policies – Commercial Development**

- (b) *Commercial facilities shall be developed in areas adequately served by necessary services, such as water, utilities, sewers, and transportation systems. Should such services not be available, the development of more intensive uses should be in concert with a localized program of public and private capital improvements to meet the expected increased needs.*

\* \* \*

- (e) *Encourage the concentration of commercial uses within and surrounding a central core area.*

**Goals – Multiple Residential**

- (a) *To provide for multiple residential developments that maximize convenience for its occupants.*
- (b) *To provide for suitable living environments that accommodate the physical, social and economic needs of the island residents.*
- (c) *To enhance the overall quality of life in our residential communities.*

**Policies – Multiple Residential**

- (a) *Appropriately zoned land shall be allocated as the demand for multiple residential dwellings increases. These areas shall be allocated with respect to places of employment, shopping facilities, educational, recreational and cultural facilities, and public facilities and utilities.*

\* \* \*

- (c) *Encourage flexibility in the design of residential sites, buildings and related facilities to achieve a diversity of socio-economic housing mix and innovative means of meeting the market requirements.*

\* \* \*

- (h) *Require developers to provide basic infrastructure necessary for development.*

**Goals – Open Space**

- (a) *Provide and protect open space for the social, environmental, and economic well being of the County of Hawai'i and its residents.*
- (b) *Protect designated natural areas.*

**Policies – Open Space**

- (b) *Encourage the identification, evaluation, and designation of natural areas.*

In summary, the Makalapua Project District is consistent with the above-noted goals and policies of the Hawai'i County General Plan.

**F. KONA COMMUNITY DEVELOPMENT PLAN**

The County of Hawai'i General Plan Section 15.1 calls for the preparation of community development plans "to translate the broad General Plan statements to specific actions as they apply to specific geographical areas". The Kona Community Development Plan

(KCDP), adopted by the County Council in September 2008 and amended in September 2019, encompasses 800 square miles of land that comprises the North and South Kona districts.

The KCDP identifies a vision for Kona's future:

*A more sustainable Kona characterized by a deep respect for the culture and the environment and residents that responsively and responsibly accommodate change through an active and collaborative community.*

In order to achieve this vision, the KCDP establishes eight (8) guiding principles that serve as the foundation for the Plan's goals, objectives, policies, and implementing actions. The Makalapua Project District has been evaluated with respect to each of the following guiding principles:

**1. Protect Kona's natural resources and culture**

A Supplemental AIS was conducted over the 110-acre Kona Commons project area, including the majority of the 69.5-acre Makalapua Project District area, and was accepted by the SHPD in August 2015. Refer to **Appendix "D"** and **Appendix "D-1"**. Additionally, an AIS was prepared for LT's Urban Phase III lands, which includes the 14.96 acres proposed for urbanization, and was accepted by the SHPD in September 2019. Refer to **Appendix "E"** and **Appendix "E-1"**.

Consistent with recommendations from the Supplemental AIS, a Data Recovery Plan was prepared and data recovery investigations were conducted for Site No. 50-10-27-30210, Feature B lava excavation in May 2023. An End-of-Fieldwork Letter Report was prepared and submitted to the SHPD, and the SHPD accepted said report in October 2023. A Data Recovery Report has also been prepared and submitted to the SHPD and is currently under review. A Burial Treatment Plan was also prepared for the burial site that was discovered in a modified lava tube (Site No. 50-10-27-18511, Feature C) in the Supplemental AIS. The Burial Treatment Plan was prepared in accordance with the requirements of HAR 13.13.300, Rules of Practice and Procedure Relating to Burial Sites and Human Remains, and was submitted to SHPD and the Hawai'i Island Burial Council for review and determination and approved on November 08, 2019. A Historic Preservation Plan was prepared for the portion of the historic trail that likely connected the Mamalahoa Trail with a shoreline trail (Site 50-10-27-30287), modified lava sinks (Site No. 50-10-27-13260) and possible ceremonial structure (Site No. 50-10-27-13261). The Historic Preservation Plan was prepared in accordance with the requirements of HAR 13.13.277, Rules Governing Requirements for Archaeological Site Preservation and Development, and was accepted by the SHPD on March 06, 2023. Additionally, LT prepared an Archaeological Monitoring



Plan (AMP) for the entire Makalapua Project District. The AMP was approved by the SHPD on February 24, 2023.

In addition, a Cultural Impact Assessment (CIA) has been prepared for the proposed project. Refer to **Appendix “K”**. The CIA concluded that the project will have limited impact on Hawaiian cultural resources, beliefs, and practices, noting that none were identified within the Makalapua Project District. The CIA and associated Ka Pa‘akai Analysis recommended that care be taken to preserve the habitat of endemic plants, culturally significant sites be preserved, water resources be protected, and that special attention be paid by the archaeological monitors during the project development.

**2. Provide connectivity and transportation choices**

The Makalapua Project District is designated as a regional center transit-oriented development (TOD) in the KCDP. The Project District is planned to be aligned with TOD and walkable district principles, as a high density and mixed-use center. Health, fitness, and connections to the land are supported with convenient access to recreation and active transportation choices.

Organized around an interconnected street network that considers State and County policies and best practice objectives for Complete Streets, the Makalapua Project District will accommodate a multi-modal design to support a variety of transportation options. The Makalapua Project District’s street network may include the realignment of Makala Boulevard below the Kona Commons Shopping Center to align with the Kailua Park’s (Old Airport Park) main access, contingent upon discussions with County agencies. Two (2) north-south extensions (Pawai Place and Ma’a Way) are also planned to be developed and improved within the Project District’s interconnected street network. Ma’a Way will be continued from the Kona Industrial Subdivision, providing connections through the Project District.

**3. Provide housing choices**

The proposed Makalapua Project District will include approximately 600 residential units. Residential products will be designed to meet the needs of a variety of new and existing households, with the primary objective of creating a rich diversity of residents by providing housing options. These will include medium- to high-density residential units in single-family and multi-family formats for sale with the potential opportunity for rentals. The project will comply with the County’s affordable housing requirements in accordance with Hawai‘i County Code Section 11-4.

**4. Provide recreation opportunities**

The Makalapua Project District will provide a variety of open space areas. Existing access to the Kailua Park, gym, and aquatic center driveways will not be adversely impacted by the project.

**5. Direct future growth patterns toward compact villages, preserving Kona's rural, diverse, and historical character**

The location of the Makalapua Project District directs future growth patterns toward existing urban areas, thereby preserving the rural and historical character of Kona. The Makalapua Project District will include residential, hotel, retail, commercial, office, and civic/community uses. The Project District will be organized around an interconnected street network where homes, businesses and entertainment are provided to promote a diverse experience for residents and visitors. In addition, LT will respect the local historical heritage of the area with architecture and landscape elements that are consistent with the patterns, materials, colors, and form found in Kona.

The Makalapua Project District is located in a transit-oriented development (TOD) regional center (Makaeo) within the Kona Urban Area, as defined by the KCDP. See **Figure 15**. It is located on lands determined by the Hawai'i County General Plan's LUPAG to be "Industrial" and "Urban Expansion". Refer to **Figure 14**.

**6. Provide infrastructure and essential facilities concurrent with growth**

The Makalapua Project District will incorporate necessary infrastructure to serve the proposed development. Internal roadways will be developed to complement the existing traffic network in the region. In addition, appropriate water distribution systems and wastewater collection and transmission systems will be developed to serve the project.

Sustainable design elements will be incorporated into the project, where feasible. Measures to conserve water usage and limit waste production will be implemented to minimize infrastructure demand.

**7. Encourage a diverse and vibrant economy emphasizing agriculture and sustainable economies**

The Makalapua Project District will provide a walkable community on lands not suitable for agricultural use, relieving development pressures on other lands that are suitable for agricultural cultivation in West Hawai'i.



Figure 15

Makalapua Project District  
Kona Community Development Plan



Prepared for: Lili'uokalani Trust

QLT\Makalapua PD 1875\Kona Comm Devip Plan\DEA

Implementation of the Makalapua Project District will provide additional economic growth opportunities for the Kailua-Kona area. The combination of expected levels of sustainability performance and development over a 10-year horizon means that the Makalapua Project District should serve as a centerpiece of green construction and technology for the local economy. A diverse range of uses are planned in close proximity of each other to support the livability of the North Kona region, while helping to expand the offerings of the region as a destination.

## 8. Promote effective governance

LT is committed to effective governance and will pursue a transparent and collaborative design process for the proposed Makalapua Project District. The project will be designed in conformance with the Hawai'i County General Plan and KCDP.

In consonance with the guiding principles of the KCDP, the following is an assessment of the Makalapua Project District's consistency with the following applicable objectives and policies established by the KCDP:

### TRANSPORTATION

#### Objective:

***TRAN-1: Transportation and Land Use.*** To organize growth on a regional level in Kona, growth should be compact and transit-supportive. Compact mixed-use villages along transit routes provide sufficient densities to support transit feasibility and enable people to meet a variety of daily needs within walking distance.

#### Policies:

***TRAN-1.1: Official Transportation Network Map.*** The Official Transportation Network Map shall show proposed transit routes, proposed arterials and collectors, and pedestrian/bicycle paths (see Figures 4-2a to 4-2d). This map shall recommend the functional classification of the roadway. The purpose of this map is to show intended interconnections, plan and preserve these corridors, budget public improvements, and provide notice to affected landowners of potential impacts from these projects. As applicable, permit approvals (e.g., rezonings, subdivisions, planned unit developments shall require the dedication of the rights-of-way and/or improvements of proposed roadways shown on the Official Transportation Map which traverse through the applicable project area. When a permitted action occurring along proposed roads depicted on the Official Transportation Network Map requires a TIAR, the extent of dedicated rights of way and/or improvements shall be proportionate to the project's impact.

***TRAN-1.6: Kailua or Makaeo Village as a Transit Hub.*** The redevelopment of Kailua should include a plan to create an intra-Kona transportation service, with Kailua Village or Makaeo Village as the "hub" or transit center. Buses would

*operate from Captain Cook to the Kailua or Makaeo Village hub. At the hub, buses would intersect with other routes operating from Keohokālole Highway (Mid-Level Road), the frontage road, and other Kona destinations. Transfers for continued travel would be made at this location.*

**Analysis:**

Kuakini Highway is identified as a major collector, secondary transit, and bike route, in the Official Transportation Map. LT will coordinate with the County for potential dedication of the roadways constructed as part of the Makalapua Project District. The KCDP identifies two (2) regional center TODs in the Kailua area; Kailua Village and Makaeo Village. The Makalapua Project District is a compact mixed-use village along a transit route within the Makaeo Village TOD. LT will continue to coordinate with County agencies in their efforts to identify an appropriate location for a transit hub in Kailua Village or Makaeo Village.

**Objective:**

***TRAN-2: Street Network Connectivity.*** *To develop a system of interconnected roads in Kona that will provide alternative transportation routes that will disperse automobile trips and reduce their length, while not compromising the through functions of arterials and major collectors with excessive intersections.*

**Policies:**

***TRAN-2.1: Connectivity Standards.*** *Connectivity refers to the directness of links and the density of connections that make up the transportation network. Within the Kona Urban Area (UA) new development shall contribute to this interconnected transportation network of streets, pedestrian, and bicycle access that work to disperse traffic and connect and integrate new development with the existing fabric of the community.*

\* \* \*

***TRAN-2.2: Access Management.*** *To preserve the through functions of arterials and major collectors, driveway access along new arterials and major collectors shall be minimized to the greatest extent consistent with the need to provide access to adjoining property. Access to such adjoining properties shall be planned to occur from local streets, and not from the arterial or collector road, whenever possible. On existing arterials and major collectors, the number of access driveways currently permitted should not be increased, and when development is proposed that would increase the usage of an existing driveway access, every effort should be made to eliminate the driveway access in favor of access at an existing or planned intersection. Four-way intersections with arterials and major collectors should be permitted only as shown on the Official Transportation Network Map (Figures 4-2a to 4-2d), in order to preserve the through functions of arterials and major collectors.*

### **Analysis:**

The proposed Makalapua Project District includes a system of interconnected roads, including the widening of a portion of Kuakini Highway, potential realignment of a portion of Makala Boulevard, and the extension of Ma'a Way and Pawai Place. The Pawai Place extension, together with the "Village Green" open spaces located along the extension, will offer a variety of commercial uses and social activities to connect the Makalapua Project District with the Kona Industrial Subdivision. The proposed roadway network, along with offsite improvements to Kuakini Highway, Kaiwi Street, and Queen Ka'ahumanu Highway will improve connectivity and traffic flow to adjoining developments. The proposed Kuakini Highway widening will preserve through functions as a major collector. The Makalapua Project District's interconnected street network accommodates a multi-modal design that considers State and County policies and best practice objectives for Complete Streets. It will support a variety of transportation options, including pedestrian, bicycle, and vehicular connectivity.

### **Objective:**

***TRAN-3: Multi-Modal System.*** *To develop a multi-modal transportation system to encourage walking, biking, transit, and other non-vehicular modes of travel. A multi-modal system needs to be attractive, safe, comfortable, convenient, accessible, environmentally friendly, and affordable. Such a system would reduce congestion, improve air quality, reduce fuel consumption, and increase healthy activity. Not only would the system enhance the mobility of the elderly and youth, who do not drive, it would also make it possible for residents to divert automobile ownership expenses to other daily needs, such as a homeownership mortgage or insurance. The network could connect pathways within and outside of street rights-of-way. The system should provide convenient transfers between modes of transportation.*

### **Policies:**

***TRAN-3.3: Right-of-Way Landscaping.*** *Recognizing that the availability of water should dictate the nature of landscaping within public rights-of-way, lush landscaping should be provided on streets where reclaimed wastewater will be available for irrigation as noted on the Official Public Facilities and Services Map (see Figure 4-10c), and xeriscape landscaping should be the preference where reclaimed wastewater is not available.*

\* \* \*

***TRAN-3.6: Multi-Modal Network.*** *The Official Transportation Network Map (Figures 4-2a to 4-2d) shall designate a system of pedestrian and bicycle paths to use as a guide for street design, public improvements, and subdivision improvements. The Action Committee may recommend amendments to the Official Transportation Network map.*

**TRAN-3.7: Traffic Calming Standards.** *In order to slow traffic for pedestrian safety or comfort, standards for traffic calming should be included, as part of the County of Hawai'i Street Standards.*

**TRAN-3.8: Inter-Modal Connections.** *To facilitate the transfer between modes of travel:*

1. *Automobile/Transit and Bike/Transit Transfer. Park and ride facilities are desirable and must be built to ameliorate the traffic congestion in Kona. A transit station or transit hub should be located within each of the TODs, as shown in the Official Transportation Network Map (Figures 4-2a to 4-2d). Park and ride facilities should be provided in the vicinity of the transit station and transit hub. Park and ride facilities should include storage for bicycles.*

\* \* \*

**Analysis:**

As mentioned previously, the Makalapua Project District's interconnected street network accommodates a multi-modal and landscaping design that considers State and County policies and best practice objectives for Complete Streets. It will support a variety of transportation options, including pedestrian, bicycle, and vehicular connectivity. Where appropriate, traffic calming features may be considered for the project.

**Objective:**

**TRAN-4 Non-Structural Solutions to Manage Congestion.** *To manage peak-hour traffic using a diversity of non-structural approaches in order to reduce congestion on Kona roads, while acknowledging that building new roads is only one of many needed solutions.*

**Policy:**

**TRAN-4.3: Managed Parking.** *New construction in Transit-Oriented Developments (TODs) should provide parking in accordance with the Village Design Guidelines in Attachment B, which were designed to limit parking as a means of discouraging automobile trips to TODs. The public improvements program, as part of the TOD Master Plan, centralized public parking facilities should be included. Public parking fees should be set low enough to be affordable yet high enough to discourage automobile use.*

**Analysis:**

The Makalapua Project District will include parking, as appropriate, to support the surrounding community and uses within the TOD.

**Objective:**

**TRAN-6: Concurrency.** *To manage the timing of growth so as to avoid overloading the arterial system.*

**Policy:**

**TRAN-6.1: Official Concurrency Map.** *Concurrency requirements shall be determined by HCC 25-2-46 and be generally consistent with the Official Concurrency Map, and be informed by a TIAR when applicable. Note: while the Concurrency Map is "Official", the proposed road alignments that have not yet been built, are only conceptual as the topography, or possible environmental and cultural resource mitigation measures may require these alignments to be adjusted.*

**Analysis:**

The Official Concurrency Map shows a preliminary alignment for this segment of Kuakini Highway makai of the Makalapua Project District. Policy TRAN-6.1 indicates that concurrency requirements such as the Kuakini Highway extension shall be informed by a TIAR when applicable. According to the project's TIAR (refer to **Appendix "N"**), traffic operations are anticipated to be acceptable within the project vicinity with the full buildout of the Makalapua Project District and associated traffic mitigations. Thus, additional roadways, such as the Kuakini Highway extension, are not projected to be necessary for operations of the Makalapua Project District within the timeframe of this project.

**LAND USE**

**Objective:**

**LU-1: Overall Growth Pattern.** *To identify areas where higher intensity growth areas should occur and areas where the rural character and open space along the shoreline should be preserved.*

**Policies:**

**LU-1.1: Official Kona Land Use Map.** *The Official Kona Land Use Map shall define the Kona Urban Area (see Policy LU-1.2) and the general locations, spacing, and type of TOD Villages (see Policies TRAN-1.3 and LU-2.3).*

**LU-1.2: Urban Area.** *The majority of future growth in Kona shall be directed to the Kona Urban Area shown on the Official Kona Land Use Map, which spans from the Kona International Airport to Keauhou subject to the policies set forth under Objective LU-2 Urban Area Growth Management.*

\* \* \*



**LU-1.4: Consistency with Land Use Pattern Allocation Guide (LUPAG).** *The current LUPAG accommodates the vision and needs for the Kona CDP area planning horizon and should be amended only for compelling reasons. Any rezoning application shall be consistent with the LUPAG.*

**LU-1.5: Enhanced Shoreline Setback.** *Beyond the 40 foot shoreline setback regulated by Hawai'i Revised Statutes (HRS) Sections 205A Part III, the County shall explore alternatives (e.g., density transfer based on gross density) for the applicant of a Special Management Area (SMA) Major Permit to dedicate to the government or land trust or encumber as open space for the purpose of realizing a shoreline linear park along as much of Kona's coastline as possible. Consistent with the Federal Coastal Zone Management Act (CZMA) and County of Hawai'i General Plan policy to retain open space and protect natural resources along with public access to and along the shoreline, it shall be a priority of the County to maintain a minimum of 1,000-foot open space no-build setback for undeveloped lands adjacent to the shoreline, on parcels which currently exceed 1,000 feet in depth, in discretionary land use approvals such as SMA major permits, rezonings, and state land use boundary amendments. Structures makai of this setback should be for public recreation and ocean-dependent facilities such as harbor improvements.*

**Analysis:**

The Makalapua Project District is located within the Kona Urban Area, an area designated by the Official Kona Land Use Map for higher intensity growth. It is located within the Makaeo Village Regional Center TOD and is consistent with the Land Use Pattern Allocation Guide (LUPAG). Further, while the Makalapua Project District is located within the SMA, it is located inland and as such, is not considered to be a shoreline adjacent property.

**Objective:**

**LU-2: Urban Area Growth Management.** *Recognizing that the LUPAG Urban Area is larger than needed in order to accommodate the projected growth within the planning horizon, future growth within the Urban Area shall be encouraged in a pattern of compact villages at densities that support public transit.*

**Policies:**

**LU-2.1: Village Types Defined—Transit-Oriented Developments (TODs) vs. Traditional Neighborhood Developments (TNDs).** *Both TODs and TNDs are compact mixed-use villages, characterized by a village center within a higher-density urban core, roughly equivalent to a 5-minute walking radius (1/4 mile), surrounded by a secondary mixed-use, mixed-density area with an outer boundary roughly equivalent to a 10-minute walking radius from the village center (1/2 mile). The distinction between a TOD and TND is that the approximate location of a TOD is currently designated on the Official Kona Land Use Map (Figure 4-7) along the trunk or secondary transit route and contains a transit station, while TND locations have not been designated and may be located off of the trunk or secondary transit route at a location approved by a rezoning action.*

**LU-2.2: TOD/TND Components.** The components of a TOD/TND include Urban Core, Secondary Core, and Greenbelt. A TOD/TND contains a higher density urban core surrounded by a lower density secondary area. A greenbelt should, in turn, surround and define the outer edge of the secondary area.

1. **Urban Core:** To control the scale and intensity of development within the urban core of a TOD/TND, there shall be two types of urban cores:
  - a. **Regional Center.** Regional centers are intended for mixed use and higher- density residential, retail, commercial, employment, and/or regional one-of-a-kind facilities, such as major civic, medical, education, and entertainment facilities. Regional centers shall be designed around a Commercial Center, which is the focus for the Village and designed to encourage pedestrian activity.

\* \* \*

**LU-2.3: TODs Identified.** To control the spacing of transit stations in support of Policy TRAN-1.2, TOD floating zones, identifying the general location of TOD, shall be limited to the following, as shown on the Official Kona Land Use Map:

\* \* \*

6. **Makaeo Village (Regional Center).** A major retail center is planned near the Old Airport Park. As a mixed use village, the plan is to introduce residential uses into the mix, design a complementary relationship to the Old Airport Park, and to integrate a transit hub or major park and ride facility for commuters (primarily resort workers).

\* \* \*

**LU-2.4: Transit-Oriented Development (TOD) Floating Zones.** Development of TODs are encouraged within the extent and locations of the floating zones shown on the Official Kona Land Use Map (Figure 4-7). These locations are approximate and become fixed pursuant to the Project District rezoning procedures as modified below:

- 1) **Minimum land area.** The minimum land area for a new community shall be consistent with the zoning code's requirements for project districts, which corresponds to the urban and secondary core.
- 2) **Project District Rezoning Application.** In addition to the requirements specified for a Project District application, the application shall include the following:
  - a. **Conceptual Master Plan.** To the extent practicable, the conceptual master plan shall at a minimum address:
    - i. **Mix of permitted uses and density;**

- ii. *Transportation systems including street layout and standards, transit routes and facilities, and bike and pedestrian pathways;*
    - iii. *Village center public facilities, of any;*
    - iv. *Infrastructure requirements, and timing;*
    - v. *Neighborhood park and public space standards;*
    - vi. *Phasing plan;*
    - vii. *Calculation and treatment of density transfer area, if any*
  - b. *A County environmental report; provided that a County environmental report shall not be required where an environmental impact statement or an environmental assessment and negative declaration have been prepared and issued in compliance with chapter 343, Hawai'i Revised Statutes, as amended.*
- 3) *State Land Use Boundary Amendment Concurrent Processing. If a State Land Use District Boundary Amendment is necessary, the Planning Director may accept the application, review the application to determine consistency with the decision criteria below, suspend the processing of the Project District until a decision is made by the State Land Use Commission, and express the County's support of the application before the State Land Use Commission as consistent with the Kona CDP and County of Hawai'i General Plan. The Project District process may then immediately resume upon favorable approval by the State Land Use Commission.*
  - 4) *Development Agreement. Concurrent with or subsequent to the adoption of a project district ordinance, a development agreement pursuant to Hawai'i County Code may be used to memorialize reciprocal agreements among the several parties responsible for implementing the plan, including the County, and thereby vest the rights as set forth in the Development Agreement.*
  - 5) *Planning Commission Review. Section 25-6-44 of the Hawai'i County Code along with Planning Commission Rules shall dictate the timing and procedures of the Planning Commission's review and processing of a project district application.*
  - 6) *Rebuttable Presumption. The Planning Director, Planning Commission, and County Council should review the TOD application with a rebuttable presumption that the project furthers the intent of Chapter 25 Zoning Code and is consistent with the goals, objectives, and policies of the County General Plan and Kona CDP, provided that the proposed location is generally consistent with the Official Kona Land Use Map and the conceptual master plan consistent with the Village Design Guidelines. This rebuttable presumption does not apply to a TND application since the general location of a TND has not been determined by the Kona CDP.*

- 7) *Amendments. Amendments to the master plan shall be processed in the same manner as the project district enabling ordinance, unless the council in the project district ordinance authorizes the amendments to be made by the director.*

**LU-2.5: Village Design Guidelines.** *The Village Design Guidelines in Attachment B should be used as a guide to the development of conceptual master plans for TODs and TNDs, as well as subsequent projects or site plans implementing the conceptual master plans. The intent of the Village Design Guidelines are to do the following:*

1. *Promote transit-oriented and pedestrian-oriented development, to increase transit use, to manage traffic congestion;*
2. *Encourage mixed-use, compact development that is pedestrian in scale and sensitive to environmental characteristics of the land, and facilitates the efficient use of public services;*
3. *Have residences, shopping, employment, and recreational uses located within close proximity with each other and efficiently organized to provide for the daily needs of the residents;*
4. *Provide for a range of housing types and affordability within pedestrian-oriented, human-scale neighborhoods;*
5. *Incorporate natural features, open space, and cultural features;*
6. *Provide efficient circulation systems for pedestrians, non-motorized vehicles, and motorists that serve to functionally and physically integrate the various land use activities; and*
7. *Promote strong neighborhood identity and focus.*

*The Village Design Guidelines suggest:*

1. *An acceptable mix of uses for regional centers, neighborhood core areas, and secondary areas;*
2. *Minimum as well as maximum residential densities;*
3. *Non-permitted uses in the urban core that are primarily automobile-dependent that detract from a walkable town center;*
4. *Pedestrian-oriented street standards, supplementing County of Hawai'i Street Standards;*
5. *Nomenclature of public facilities and siting criteria that serve as the town focus;*
6. *Density transfer calculation methodology; and*
7. *Transportation standards.*

**LU-2.6: TOD/TND Public Infrastructure and Facilities.** *To encourage the development of TODs and TNDs, public financing sources should pay 100% for:*

- *Major proposed trunk transit route,*

- *A transit station (or transit station component if the transit station is part of a private mixed- use project) within the Urban Core,*
- *A major park or plaza within the urban core.*

*In the preparation of the conceptual master plan, the applicant should coordinate the input of appropriate agencies to identify sites and financing of appropriate public facilities such as schools, libraries, and post offices, with respective financial commitments between public and private sources documented in the master plan. The County water allocation and capital improvement policies in Section 4.6: Public Facilities, Infrastructure and Services, Policy PUB-4.1 should further support the development of the TODs.*

**Analysis:**

The Makalapua Project District is an urban infill project located within the Makaeo Village Regional Center TOD. It will be a mixed-use development within an interconnected street network with densities that would support public transit.

As noted in the Project District Rezoning Application requirements under LU-2.4, to the extent practicable, the master plan for the Makalapua Project District will conform with the Village Design Guidelines. As part of the Project District approval process, the Makalapua Project District will undergo Design Center review to ensure that appropriate development standards are established for the project district ordinance related to unit types; transect zones; civic zones; density and parking calculations; and building disposition, configuration, and function.

This Environmental Assessment document has been prepared in accordance with Hawai'i Revised Statutes (HRS) Chapter 343. A State Land Use District Boundary Amendment will be filed and processed concurrent with the Project District Rezoning application.

**Objective:**

***LU-4: Pro-active Design Review.*** *To foster a spirit of excellence, creativity and collaboration among the applicants, community, and County to meet the Kona CDP goals, objectives and policies.*

**Policies:**

***LU-4.1: Design Center Establishment.*** *The County Planning Department shall establish a Design Center to accomplish the following objectives:*

1. *To support and expedite the translation and implementation of the Kona CDP goals, objectives, policies, actions, and design guidelines as applied to proposed development projects;*
2. *To be a catalyst for creative excellence and innovation;*
3. *To foster public-private partnerships;*

4. *To promote coordination and collaboration among the community, government agencies, applicants, landowners, professionals, and educational institutions;*
5. *To provide education on best design practices to applicants, government staff, community members, educators and students; and,*
6. *To award and recognize exemplary projects.*

*Although the Design Center will be administered by the Planning Department and staffed by County employees, the department may organize a technical committee of interdisciplinary volunteers.*

**LU-4.2: Mandatory Review.** *The Design Center shall review and provide recommendations to the applicant prior to submittal of the application to the Planning Department for all master plans prepared for floating zones (TODs/TNDs, Affordable Housing, Eco-Industrial) and Clustered Rural Subdivision PUDs. Projects implementing these master plans, as well as any other project within the Kona CDP planning area, are encouraged, but not required, to be reviewed by the Design Center.*

**Analysis:**

LT will continue to coordinate with the County on Design Center review of the project. Design Center review will occur prior to the filing of the land use entitlement applications for the project. Recommendations provided by the Design Center will be incorporated into the project as much as practical.

**ENVIRONMENTAL RESOURCES**

**Objective:**

**ENV-1: Managing Impacts.** *In order to minimize impacts on the land, make use of best management planning practices for any land-based endeavor by balancing public and private rights, and taking advantage of an ever-improving knowledge of resource sensitivity and natural processes.*

**Policy:**

**ENV-1.5: Sensitive Resources.** *In the context of Kona's ecology and history, the following natural and cultural resources shall be considered sensitive and therefore shall be inventoried, as part of any permit application to the County Planning Department:*

\* \* \*

- *Historic trails;*
- *Archaeological and historic sites subject to protection under HRS Chapter 6E*

### **Analysis:**

As mentioned previously, there were two (2) AISs conducted, which cover a majority of the Makalapua Project District area, and which inventoried a number of historic sites. Additionally, as recommended by the AISs, a Historic Preservation Plans was prepared for modified lava sinks (Site 50-10-27-13260), possible ceremonial structures (50-10-27-13261), and a portion of a historic trail (Site 50-10-27-30287) that likely connected the Malamahoa Trail with a shoreline trail. Additionally, a Data Recovery Plan was prepared and data recovery investigations were conducted for Site 50-10-27-30210, Feature B lava excavation in May 2023. An End-of-Fieldwork Letter Report was prepared and submitted to the SHPD, and the SHPD accepted said report in October 2023. A Data Recovery Report has also been prepared and submitted to the SHPD and is currently under review. A Burial Treatment Plan was also prepared and approved for the burial site that was discovered in a modified lava tube (Site 50-10-27-18511). Furthermore, LT proposes that archaeological monitoring be conducted for the entire Makalapua Project District during construction. LT prepared an AMP and SHPD approved the AMP on February 24, 2023.

## **CULTURAL RESOURCES**

### **Objective:**

***CR-3: Preservation of Kanaka Maoli Culture and Island Values.*** Ensure that our Kanaka Maoli and island values and cultures are preserved and perpetuated.

### **Policies:**

***CR-3.1: Honor Kanaka Maoli culture and heritage.*** The Kanaka Maoli culture is the foundation of Hawai'i's living culture. We must ensure that the Kanaka Maoli people are supported and that this part of our culture is perpetuated. The success of this endeavor will ensure that the way of the Kanaka Maoli will guide our actions and behaviors in the years ahead.

***CR-3.2: Preserve and perpetuate our Hawaiian and island cultural values by celebrating our cultural diversity and island way of life.*** Our diversity likewise defines us. Ensuring that our cultural practices flourish through language, dance, song, and art is crucial to sustaining who we are as a people. We must protect and nurture all aspects of our diverse history, traditions and cultures.

***CR-3.3: Enable Kanaka Maoli and others to pursue traditional Kanaka Maoli lifestyles and practices.*** We must provide opportunities to those who want to pursue and perpetuate the way of the Kanaka Maoli.

### **Analysis:**

The vision for the Makalapua Project District is consistent with the objective to preserve and perpetuate the Kanaka Maoli and island values and cultures. The

project seeks to: *create a mixed-use, walkable, village center, that is culturally vibrant, economically resilient, and connected to the 'āina. A place where families can gather, that is grounded by history and prepared for the future.*

## **HOUSING**

### **Objective:**

***HSG-4: Build More Units.*** *To build more units that offer a variety of housing types, tenures, and affordability.*

### **Policies:**

***HSG-4.4: Housing Variety and Suggested Unit Credits for other Affordable Housing Projects.*** *The housing in TODs and TNDs should be designed to mix the types, tenures, and affordability at the block level, to the extent practicable.*

***HSG-4.5: Innovation Encourages for Redevelopment Projects.*** *In Kailua Village, or the Rural Towns and Villages, landowners or developers who wish to develop affordable housing by rehabilitating or adapting an existing building, building a new infill building, or providing such housing above a commercial establishment may bring their proposal to the Design Center. The Design Center shall assist with any building code, zoning code, or other permitting issues to facilitate and enable the construction of such units. The level of assistance, such as permit coordination or subsidy financing, may increase proportionate to the number of committed affordable units.*

### **Analysis:**

The Makalapua Project District will include approximately 600 residential units designed to meet the needs of a variety of new and existing households, with the primary objective of creating a rich diversity of residents by providing a wide range of housing choices, including medium- to high-density residential units in single-family and multi-family formats for sale with the potential opportunity for rentals. It is noted that the proposed project will undergo Design Center review with the County of Hawai'i prior to the filing of the land use entitlement applications.

### **Objective:**

***HSG-5: Maintain Affordable Housing Stock.*** *To maintain an inventory of affordable units to meet present and future needs, while providing some opportunity for homeowners to upgrade their housing condition through equity appreciation.*



**Policy:**

**HSG-5.2: Privately-Constructed Affordable Units.** For private projects subject to affordable housing requirements, the Kona Housing Non-Profit or other non-profit shall have a first right of refusal to 10% of the required affordable units. All affordable units shall remain affordable for 40 years. No restrictions may apply after 40 years based on the rationale that newer homes will replace these older homes in the affordable housing stock. During the resale-restricted period, the level of restriction shall meet the following minimum requirements:

- **1st 20 years:** The affordable units shall have a minimum 20-year controlled appreciation restriction (cost of improvements plus appreciation based on the Honolulu Consumer Price Index);
- **After 20 years:** The owner may sell the property at market value with a shared appreciation with the County or Kona Housing Non-Profit at 50%;
- **Right of First Refusal:** After 20-years, the Kona Housing Non-Profit shall have the right of first refusal to purchase the unit;
- **Owner-occupancy:** During the resale-restricted period, affordable units shall remain owner-occupied or rented out by the owner at an affordable rate as certified by the County real property tax division pursuant to the affordable rent provisions in HCC Chapter 19.

**Analysis:**

The Makalapua Project District will comply with the County's affordable housing requirements in accordance with Hawai'i County Code Section 11-4.

**PUBLIC FACILITIES, INFRASTRUCTURE, AND SERVICES**

**Objective:**

**PUB-4: Growth Management.** To prioritize and locate growth-supporting infrastructure (water, sewer, drainage) to support the TODs and infill development and to minimize the environmental impacts of such growth.

**Policies:**

**PUB-4.1: Water for TODs.** To encourage and direct development to the TODs, a priority should be to provide an appropriately sized water transmission line within the Keohokālole Highway Corridor, and to flexibly enable water allocation policies to support the Kona CDP land use policy to concentrate growth within the TODs, in lieu of sprawl.

\* \* \*

**PUB-4.4: Sewer Priorities.** In order to protect the nearshore water quality, the requirement to hookup to the County sewer system (HCC Section 21-5) shall be strictly enforced.

**Analysis:**

The Makalapua Project District is consistent with the TOD designation, and LT will continue to coordinate with DWS regarding the water system for the project. The Makalapua Project District will connect to the County sewer system.

**Objective:**

***PUB-6: Quality of Life.*** *To foster a sense of community and health through the public realm such as gathering places, parks, pedestrian networks, and open spaces.*

**Policy:**

***PUB-6.1: Gathering Places.*** *TODs shall include appropriate public gathering areas, such as plazas, in accordance with the intent of the Village Design Guidelines. The planning and design of such public spaces shall address any maintenance requirements.*

**Analysis:**

The Makalapua Project District includes at least five (5) percent of the project area (approximately 3.5 acres) as open space, in accordance with the Kona Village Design Guidelines' open space requirement. Specifically, approximately 1.6 acres will be provided as a large open gathering space, referred to as "Village Green", in the southwest part of the Makalapua Project District, which is envisioned to be the center of social activities within the project area. Other open space features, such as pocket parks and trails, will also be provided throughout the Makalapua Project District.

In summary, the Makalapua Project District falls within the framework of the guiding principles and overall objectives of the KCDP. The proposed project is a compact mixed-use, development that seeks to enhance quality of life for residents in the region. In addition, the proposed Makalapua Project District is consistent with the official KCDP map. As shown in **Figure 15**, the Makalapua Project District is located within a TOD regional center in the urban area identified by the KCDP.

**G. COUNTY ZONING**

The County of Hawai'i Zoning Code represents a more detailed framework for land use management. The Zoning Code is the legal instrument that regulates the use of land and implements the General Plan. It establishes various types of zoning districts and allowable uses and development standards for each. The Zoning Code should be consistent with the LUPAG.

The lands are currently classified as General Industrial (MG), Industrial-Commercial Mixed (MCX), and Agricultural District (A-5a) by Hawai'i County Zoning. See **Figure 16**. It is noted that portions of the proposed Makalapua Project District development program are permitted by the existing MG and MCX zoning.

While portions of the Makalapua Project District can proceed under existing zoning designations, because the project site is within a TOD-designated area, LT's intent is to rezone the entire Makalapua Project District area as "Project District" to provide a comprehensive and flexible zoning approach for the area. Project District zoning is intended to provide for a flexible and creative planning approach for developments, allowing flexibility in location of specific uses and mixes of structural alternatives. Project District zoning also allows for the development of residential uses, which is not permissible under the current zoning designations. A Change of Zone application will be submitted by LT to the County of Hawai'i Planning Department to request that the property zoning designation be changed to "PD, Project District". The proposed project is consistent with the criteria for establishing a project district as stipulated by Section 25-6-41, Hawai'i County Code.

LT may proceed with development of portions of the Makalapua Project District utilizing existing entitlements as a first phase of the overall project, prior to completion of the proposed land use entitlement processes for the overall Makalapua Project District. In consultation with the Department of Planning, there are sufficient land use entitlements to proceed with this phased approach to development, should LT choose to do so.

## **H. PROJECT DISTRICT ZONING CRITERIA**

Hawai'i County Code, Section 25-6-41 regarding criteria for establishing a project district states:

*A project district may be established as an amendment to the zoning code whenever the public necessity and convenience and the general welfare require that a comprehensive planning approach for an area should be adopted in order to establish a continuity in land uses and designs while providing a comprehensive network of infrastructural facilities and systems.*

The proposed Makalapua Project District includes a mix of residential, hotel, retail, commercial, office, and open space uses planned around an interconnected street network where homes, businesses, and entertainment are provided to promote a diverse experience for residents and visitors. The project is proposed in a convenient location to the northwest of the existing Kailua-Kona urban core and adjacent to the existing Kona Commons Shopping Center and is consistent with the intent and purpose set forth by the zoning code.

In addition, the following criteria is specified for Project District zoning:



Figure 16

Makalapua Project District  
Hawai'i County Zoning



Prepared for: Lili'uokalani Trust

1. **Is consistent with the intent and purpose of this chapter (zoning code) and the County general plan**

As noted above, the proposed Makalapua Project District is consistent with the intent of the zoning code and the criteria described for establishing Project District zoning. It is also consistent with the goals and policies of the Hawai'i County General Plan listed in Section C of this chapter.

2. **Will not result in a substantial adverse impact upon the surrounding area, community or region**

The Makalapua Project District was designed to complement the surrounding land uses and community and is not anticipated to result in substantial adverse impacts to the Kona area.

I. **HAWAI'I COASTAL ZONE MANAGEMENT PROGRAM – OBJECTIVES AND ENFORCEABLE POLICIES**

The State of Hawai'i Coastal Zone Management Program (HCZMP), as formalized in Chapter 205A, HRS, establishes objectives and policies for the preservation, protection, and restoration of natural resources of Hawai'i's coastal zone. The majority of the Makalapua Project District falls within the County of Hawai'i's Special Management Area (SMA). See **Figure 17**. As such, an SMA Use Permit will be obtained.

As set forth in Chapter 205A, HRS, this section addresses the project's relationship to applicable coastal zone management considerations.

1. **Recreational Resources**

**Objective:**

*Provide coastal recreational opportunities accessible to the public.*

**Policies:**

- a. *Improve coordination and funding of coastal recreational planning and management; and*
- b. *Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:*
- c. *Improve coordination and funding of coastal recreational planning and management; and*

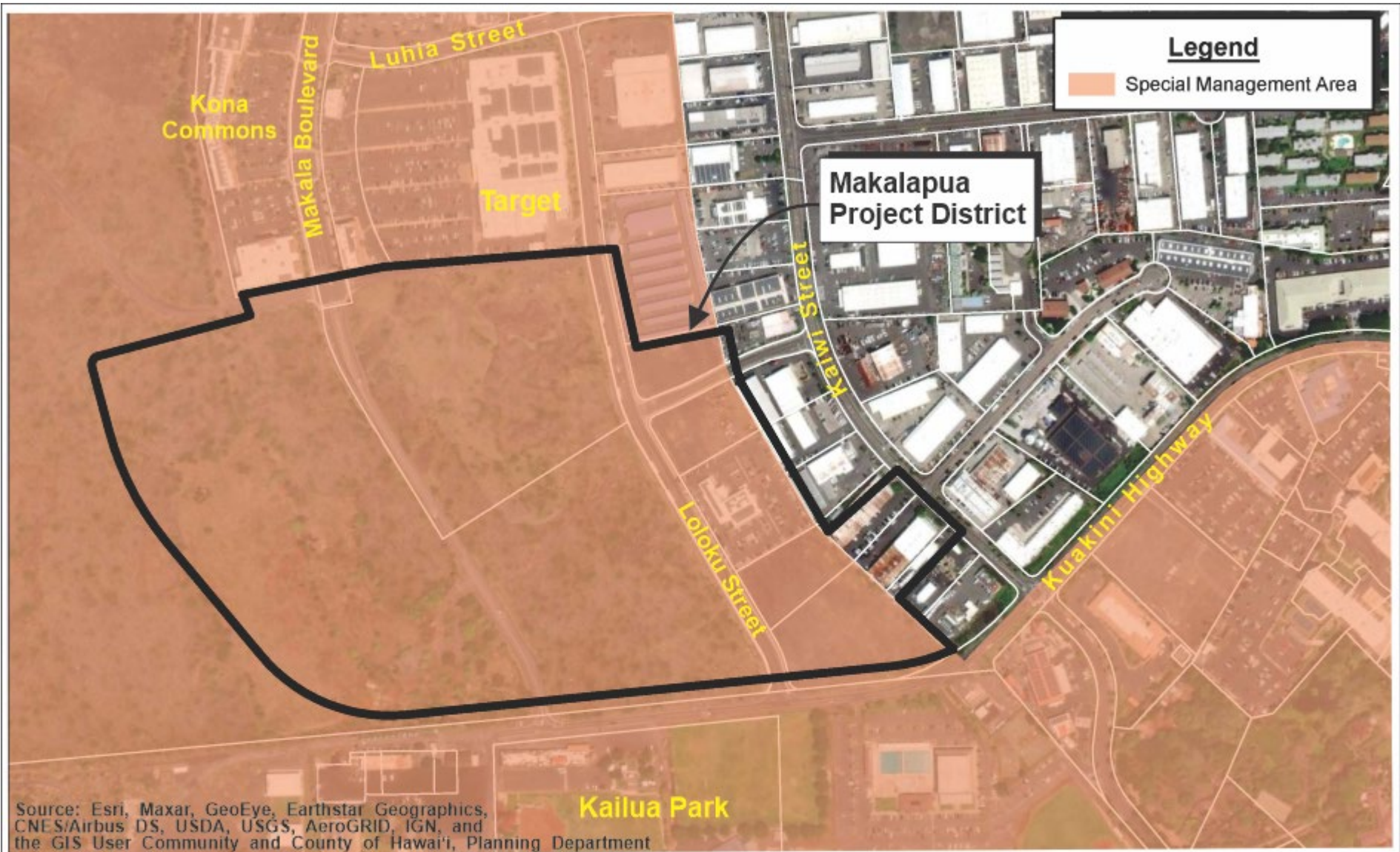


Figure 17

Makalapua Project District  
 Special Management Area Boundary Map



Prepared for: Lili'uokalani Trust

- d. *Improve coordination and funding of coastal recreational planning and management; and*
- e. *Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:*
  - i. *Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;*
  - ii. *Requiring restoration of coastal resources that have significant recreational and ecosystem value, including but not limited to coral reefs, surfing sites, fishponds, sand beaches, and coastal dunes, when these resources will be unavoidably damaged by development; or requiring monetary compensation to the State for recreation when restoration is not feasible or desirable;*
  - iii. *Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;*
  - iv. *Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;*
  - v. *Ensuring public recreational uses of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;*
  - vi. *Adopting water quality standards and regulating point and nonpoint sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;*
  - vii. *Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and*
  - viii. *Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, and county authorities; and crediting such dedication against the requirements of section 46-6.*

**Response:** Development of the proposed Makalapua Project District is not anticipated to present significant adverse impacts on coastal recreational opportunities. Proposed roadway improvements and new connector roads will

improve connectivity and access to coastal recreational opportunities at Kailua Park.

## 2. **Historic Resources**

### **Objective:**

*Protect, preserve, and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.*

### **Policies:**

- a. *Identify and analyze significant archaeological resources;*
- b. *Maximize information retention through preservation of remains and artifacts or salvage operations; and*
- c. *Support state goals for protection, restoration, interpretation, and display of historic resources.*

**Response:** As noted previously, a Supplemental AIS was conducted over the 110-acre Kona Commons project area, including the majority of the 69.5-acre Makalapua Project District, and was accepted by the SHPD in August 2015. Refer to **Appendix “D”** and **Appendix “D-1”**. Additionally, an AIS was prepared for LT’s Urban Phase III lands, which includes the 14.96 acres proposed for urbanization, and was accepted by the SHPD in September 2019. Refer to **Appendix “E”** and **Appendix “E-1”**.

Consistent with recommendations from the Supplemental AIS, a Data Recovery Plan was prepared and data recovery investigations were conducted for Site No. 50-10-27-30210, Feature B lava excavation in May 2023. An End-of-Fieldwork Letter Report was prepared and submitted to the SHPD, and the SHPD accepted said report in October 2023. A Data Recovery Report has also been prepared and submitted to the SHPD and is currently under review. A Burial Treatment Plan was also prepared for the burial site that was discovered in a modified lava tube (Site No. 50-10-27-18511, Feature C) in the Supplemental AIS. The Burial Treatment Plan was prepared in accordance with the requirements of HAR 13.13.300, Rules of Practice and Procedure Relating to Burial Sites and Human Remains, and was submitted to SHPD and the Hawai’i Island Burial Council for review and determination and approved on November 08, 2019. A Historic Preservation Plan was prepared for the portion of the historic trail that likely connected the Mamalahoa Trail with a shoreline trail (Site No. 50-10-27-30287), modified lava sinks (Site No. 50-10-27-13260) and possible ceremonial structure (Site No. 50-10-27-13261). The Historic Preservation Plan was prepared in accordance with



the requirements of HAR 13.13.277, Rules Governing Requirements for Archaeological Site Preservation and Development, and was accepted by the SHPD on March 06, 2023. Additionally, LT prepared an AMP for the entire Makalapua Project District. The AMP was approved by the SHPD on February 24, 2023.

In addition, a CIA has been prepared for the proposed project. Refer to **Appendix “K”**. The CIA concluded that the project will have limited impact on Hawaiian cultural resources, beliefs, and practices, noting that none were identified within the Makalapua Project District. The CIA and associated Ka Pa‘akai Analysis recommended that care be taken to preserve the habitat of endemic plants, culturally significant sites be preserved, water resources be protected, and that special attention be paid by the archaeological monitors during the project development. The full Ka Pa‘akai Analysis and its findings can be reviewed **Appendix “K”**.

### **3. Scenic and Open Space Resources**

#### **Objective:**

*Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.*

#### **Policies:**

- a. *Identify valued scenic resources in the coastal zone management area;*
- b. *Ensure that new developments are compatible with their visual environment by designing and locating those developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;*
- c. *Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and*
- d. *Encourage those developments that are not coastal dependent to locate in inland areas.*

**Response:** Scenic resources in the vicinity of the Makalapua Project District include the Pacific Ocean to the west and the Hualālai volcano to the east. The steep slopes of Hualālai provide a green backdrop when viewed from the coast and offer views of the coastline, Pacific Ocean, and horizon from higher elevations.

The Makalapua Project District is adjacent to the Kona Commons Shopping Center and Kona Industrial Subdivision and is not located within an identified scenic vista

or view plane. As mentioned previously, The LUPAG designates the Makalapua Project District area as “Industrial” and “Urban Expansion”.

Given that the surrounding commercial and industrial uses and LUPAG designation, no significant adverse impacts to scenic resources are anticipated as a result of the proposed project. LT is committed to developing the project in a manner which will respect the architectural and landscape values of the island and will incorporate open space features throughout the development.

#### **4. Coastal Ecosystems**

##### **Objective:**

*Protect valuable coastal ecosystems, including reefs, beaches, and coastal dunes, from disruption and minimize adverse impacts on all coastal ecosystems.*

##### **Policies:**

- a. *Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;*
- b. *Improve the technical basis for natural resource management;*
- c. *Preserve valuable coastal ecosystems of significant biological or economic importance, including reefs, beaches, and dunes;*
- d. *Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and*
- e. *Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.*

**Response:** A comprehensive program of Best Management Practices (BMPs) will be developed and implemented during construction of the Makalapua Project District to minimize the potential for construction-related impacts and runoff to adjacent properties and coastal environments. In addition, permanent BMPs and LID strategies, such as permeable paving systems, bio-swales, and bio-filtration for stormwater management, are being considered for the proposed project to minimize pollutants from entering the ground and nearshore waters. Onsite drainage improvements will be designed and constructed to mitigate potential impacts associated with stormwater runoff in accordance with the “Storm Drainage

Standards”, Department of Public Works, County of Hawai‘i, dated October 1970, as amended. With the improvements noted above, no adverse impacts are anticipated as a result of the proposed project.

**5. Economic Uses**

**Objective:**

*Provide public or private facilities and improvements important to the State’s economy in suitable locations.*

**Policies:**

- a. *Concentrate coastal dependent development in appropriate areas;*
- b. *Ensure that coastal dependent development and coastal related development are located, designed, and constructed to minimize exposure to coastal hazards and adverse social, visual, and environmental impacts in the coastal zone management area; and*
- c. *Direct the location and expansion of coastal development to areas designated and used for that development and permit reasonable long-term growth at those areas, and permit coastal development outside of designated areas when:*
  - (i) *Use of designated locations is not feasible;*
  - (ii) *Adverse environmental effects and risks from coastal hazards are minimized; and*
  - (iii) *The development is important to the State’s economy.*

**Response:** The proposed project will generate positive economic impacts associated with construction-related spending and employment during the 10-year phased development of the Makalapua Project District. Upon completion, residents of the Makalapua Project District area will contribute to the local economy through household spending on goods and services, while commercial and hotel development will support new employment and economic growth opportunities in the region.

**6. Coastal Hazards**

**Objective:**

*Reduce hazard to life and property from coastal hazards.*

**Policies:**

- a. *Develop and communicate adequate information about the risks of coastal hazards;*
- b. *Control development, including planning and zoning control, in areas subject to coastal hazards;*
- c. *Ensure that developments comply with requirements of the National Flood Insurance Program; and*
- d. *Prevent coastal flooding from inland projects.*

**Response:** The Makalapua Project District is located in Flood Zone X, an area of minimal flood hazard. Refer to **Figure 8**. The Makalapua Project District is also located outside of the tsunami evacuation area. Refer to **Figure 9**. In addition, the project is located outside (inland) of the projected sea level rise exposure area under the 3.2-foot sea level rise scenario. Refer to **Figure 12**.

The proposed Makalapua Project District will be designed in accordance with local drainage standards, as applicable, to ensure that the project will not result in adverse flooding or erosion impacts to surrounding properties.

**7. Managing Development**

**Objective:**

*Improve the development review process, communication, and public participation in the management of coastal resources and hazards.*

**Policies:**

- a. *Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;*
- b. *Facilitate timely processing of applications for development permits and resolve overlapping or conflicting permit requirements; and*
- c. *Communicate the potential short- and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.*

**Response:** Public input will be solicited in coordination with the processing of the EA, pursuant to the Chapter 343, HRS environmental documentation review process. All aspects of the project will be conducted in accordance with applicable Federal, State, and County standards. Opportunities for review of the proposed action will also be offered through the land use entitlements review process for the

District Boundary Amendment, Change of Zone, and SMA Use Permit applications.

**8. Public Participation**

**Objective:**

*Stimulate public awareness, education, and participation in coastal management.*

**Policies:**

- a. *Promote public involvement in coastal zone management processes;*
- b. *Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal issues, developments, and government activities; and*
- c. *Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.*

**Response:** The EA for the Makalapua Project District will be processed in accordance with Chapter 343, HRS, and opportunity for comment by agencies and the public will be provided. As noted above, the land entitlement processes will also provide opportunities for public dialogue and input. In addition, LT has been consulting with various stakeholder groups through a community outreach and participation program to ensure that the Makalapua Project District is respectful of the community's needs and vision.

**9. Beach and Coastal Dune Protection**

**Objective:**

*Protect beaches and coastal dunes for:*

- i. *Public use and recreation*
- ii. *The benefit of coastal ecosystems; and*
- iii. *Use as natural buffers against coastal hazards; and*
- iv. *Coordinate and fund beach management and protection.*

**Policies:**

- a. *Locate new structures inland from the shoreline setback to conserve open space, minimize interference with natural shoreline processes, and minimize loss of improvements due to erosion;*
- b. *Prohibit construction of private shoreline hardening structures, including seawalls and revetments, at sites having sand beaches and at sites where shoreline hardening structures interfere with existing recreational and waterline activities;*
- c. *Minimize the construction of public shoreline hardening structures, including seawalls and revetments, at sites having sand beaches and at sites where shoreline hardening structures interfere with existing recreational and waterline activities;*
- d. *Minimize grading of and damage to coastal dunes;*
- e. *Prohibit private property owners from creating a public nuisance by inducing or cultivating the private property owner's vegetation in a beach transit corridor; and*
- f. *Prohibit private property owners from creating a public nuisance by allowing the private property owner's unmaintained vegetation to interfere or encroach upon a beach transit corridor.*

**Response:** The Makalapua Project District will utilize appropriate BMPs to manage overall drainage for the project area and protect beaches and coastal waters near the project. A comprehensive drainage system will be developed as part of the Makalapua Project District to ensure project-related increases in stormwater runoff are retained onsite such that there will be no adverse impacts on downstream properties. Stormwater runoff will be collected by swales, ditches, gutters, inlets, and/or catch basins, and conveyed to drywells and/or infiltration areas for onsite disposal. Refer to **Appendix "B"**. The drywells are proposed in parking lots, along roadways, and other locations where space is available throughout the project site. Drainage improvements will be designed in accordance with the "Storm Drainage Standards", Department of Public Works, County of Hawai'i, dated October 1970, as amended.

**10. Marine and Coastal Resources**

**Objective:**

*Promote the protection, use, and development of marine and coastal resources to assure their sustainability.*

**Policies:**

- a. *Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;*
- b. *Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;*
- c. *Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;*
- d. *Promote research, study, and understanding of ocean and coastal processes, impacts of climate change and sea level rise, marine life, and other ocean resources to acquire and inventory information necessary to understand how coastal development activities relate to and impact ocean and coastal resources; and*
- e. *Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.*

**Response:** The Makalapua Project District does not involve development on any shoreline properties. As mentioned previously, the project will utilize appropriate BMPs to mitigate construction impacts and will include drainage improvements to address project-related increases in stormwater runoff. As such, the proposed project is not anticipated to present significant adverse impacts on the shoreline or marine resources.

In addition to the foregoing objectives and policies, SMA permit review criteria pursuant to Chapter 205A-30.5, HRS, Prohibitions, provides that:

- (a) *No special management area use permit or special management area minor permit shall be granted for structures that allow artificial light from floodlights, uplights, or spotlights used for decorative or aesthetic purposes when the light:*
  - (1) *Directly illuminates the shoreline and ocean waters;*  
*or*
  - (2) *Is directed to travel across property boundaries toward the shoreline and ocean waters.*
- (b) *Subsection (a) shall not apply to special management area use permits for structures with:*

- (1) *An outdoor lighting fixture that is located on the grounds of a hotel, hotel-condominium, or condominium-hotel as defined in section 486K-1; provided that:*
  - (A) *The outdoor lighting fixture is located underwater or is directed downward and illuminates a limited area of no more than thirty feet into the shoreline and ocean waters; or*
  - (B) *The outdoor lighting fixture is the only practicable means of ensuring the safety and security of guests, visitors, and employees; and*
- (2) *Artificial lighting provided by a government agency or its authorized users for government operations, security, public safety, or navigational needs; provided that a government agency or its authorized users shall make reasonable efforts to properly position or shield lights to minimize adverse impacts.*

**Response:** The proposed Makalapua Project District does not involve any development immediately adjacent to the shoreline. Nevertheless, all applicable State and County lighting requirements will be followed to minimize adverse lighting-related impacts for this development.

## **J. SPECIAL MANAGEMENT AREA RULES OF THE HAWAI'I PLANNING COMMISSION**

The Special Management Area Rules of the Hawai'i Planning Commission, Rule 9, were established in order to implement Hawai'i Revised Statutes, Chapter 205A relating to coastal zone management and Special Management Areas. In addition to establishing procedures for processing of Special Management Area (SMA) applications and procurement of related permits, the rules assist the Commission in giving consideration to State policy regarding coastal zones. It is noted that amendments to the Rule 9 regarding SMA was approved at the Joint Planning Commission meeting on June 2, 2023, with an exception of rules related to waiver of public hearing and action.

The project site is located within the County of Hawai'i's SMA. Refer to **Figure 17**. A SMA Use Permit (SMA 201) was issued in 1983 for an approximately 100-acre area between Queen Ka'ahumanu Highway and Kuakini Highway for the development of an industrial subdivision. SMA 201 was amended in 2005 to allow for industrial-commercial mixed uses permitted by MCX zoning. While portions of the Makalapua Project District are consistent with the MCX zoning approved by SMA 201, a new SMA Use Permit will be sought for the project area to bring consistency with the proposed Project District zoning.



LT may proceed with development of portions of the Makalapua Project District utilizing existing entitlements, including SMA 201, as a first phase of the overall project, prior to completion of the proposed land use entitlement processes for the overall Makalapua Project District. In consultation with the Department of Planning, there are sufficient land use entitlements to proceed with this phased approach to development, should LT choose to do so.

This section assesses the proposed action with respect to the criteria of significant adverse effect as set forth in the Special Management Area Rules of the County of Hawai'i:

1. **Involves an irrevocable commitment to loss or destruction of any natural or cultural resources, including but not limited to, historic sites and view planes outlined in the General Plan or other adopted plans**

As discussed in Chapter II, two (2) AISs were completed in the project area. Consistent with recommendations from the AISs, a Data Recovery Plan was prepared and data recovery investigations were conducted for Site No. 50-10-27-30210, Feature B lava excavation in May 2023. A Data Recovery Report has also been prepared and submitted to the SHPD and is currently under review. An End-of-Fieldwork Letter Report was prepared and accepted by the SHPD in October 2023. A Burial Treatment Plan was also prepared in accordance with HAR 13.13.300, Rules of Practice and Procedure Relating to Burial Sites and Human Remains, for the burial site that was discovered in a modified lava tube (Site No. 50-10-27-18511, Feature C). The Burial Treatment Plan was submitted to SHPD and the Hawai'i Island Burial Council for review and determination and approved on November 08, 2019. A Historic Preservation Plan was prepared for the significant sites identified in the two (2) AISs, including the portion for the historic trail that likely connected Mamalahoa Trail with the shoreline trail (Site No. 50-10-27-30287), the modified lava sinks (Site No. 50-10-27-13260), and the possible ceremonial structure (Site 50-10-27-13261) in accordance with HAR 13.13.277, Rules Governing Requirements for Archaeological Site Preservation and Development. The Archaeological Preservation Plan was accepted by the SHPD on March 06, 2023. Additionally, LT has prepared an AMP for the entire Makalapua Project District, which was submitted to SHPD for and approved on February 24, 2023.

In addition, the CIA prepared for the project concluded that the project will have limited impact on cultural resources, beliefs, and practices, noting that none were identified within the Makalapua Project District. However, as noted in the CIA, care will be taken to preserve the habitat of endemic plants and access for gathering activities. As such, no impacts to natural and cultural resources are anticipated as a result of the proposed project.

The Ka Pa‘akai Analysis included within the CIA determined the development in the project area will impact Hawaiian cultural resources and practices within the project area such as water, other wahi kūpuna, and plant resources associated with cultural practices as well as resources reliant on water both *ma kai* and *ma uka*. The proposed project has the potential to impact additional undocumented burials and wahi kupuna in the project area. However, mitigation measures recommended by the CIA, such as cultural monitoring and greater engagement and consultation with the Hawaiian Community and organizations, will be implemented to minimize any potential impacts associated with the project.

Given the surrounding commercial and industrial uses and the Hawai‘i County General Plan’s Land Use Pattern Allocation Guide designation of the project site as “Industrial” and “Urban Expansion”, significant adverse impacts to the visual character of the area are not anticipated. LT is committed to developing the project in a manner which will respect the landscape and architectural values of the island.

**2. Curtails the range of beneficial uses of the environment**

The proposed Makalapua Project District is a mixed-use development including residential, hotel, retail, commercial, office, and recreational uses proposed on land that is primarily vacant. It will serve to meet the varied housing and commercial needs of the region at an attractive growth location adjacent to Kailua-Kona. Although a small portion of the land is within the State “Agricultural” district, the area does not have a history of recent agricultural use and the site is not under active agricultural cultivation. Therefore, the proposed Makalapua Project District will optimize, rather than curtail, the beneficial uses of the environment.

**3. Conflicts with the long-term environmental policies or goals of the General Plan or the State Plan**

As described in Sections B and C of this Chapter, the proposed project does not conflict with the Hawai‘i State Plan or the Hawai‘i County General Plan.

**4. Significantly affects the economic or social welfare and activities of the community, County or State**

The proposed Makalapua Project District will generate positive economic impacts associated with construction-related spending and employment during the implementation of the project. Furthermore, the proposed Makalapua Project District responds to the need to provide housing and economic growth opportunities for the County’s growing population. The project will serve to meet the varied housing, commercial, and lodging needs of the region at an attractive growth location adjacent to the existing Kailua-Kona town. Upon completion, residents of the Makalapua Project District will contribute to the local economy

through household spending on goods and services, while commercial development will support new employment and business opportunities in the region.

5. **Involves significant secondary impacts, such as population changes and increased effects on public facilities**

The proposed Makalapua Project District is not expected to result in substantial secondary impacts. Hawai'i County's population is projected to grow over the next 20 years regardless of whether the proposed project is built, and demands on infrastructure and public services will increase accordingly. The proposed project will accommodate projected growth in the region through the development of a compact, mixed-use, transit-oriented community that is consistent with the vision set forth in the KCDP. LT will provide necessary infrastructure to serve the development while limiting the impacts on public systems and services.

6. **In itself has no significant adverse effect but cumulatively has considerable adverse effect upon the environment or involves a commitment for larger actions**

As previously discussed, the proposed Makalapua Project District is not part of a larger action, but will be developed in the context of a pattern of overall change and growth in the region given the other planned residential and commercial development projects in West Hawai'i.

The cumulative impacts of the Makalapua Project District, together with other reasonably foreseeable actions such as the adjacent, but separate, Keahuolū Land Plan, Kailua Park Master Plan, Kamakana Villages, and La'i Ōpua Master Plan will likely include increased population and greater demands on public infrastructure. While the Makalapua Project District will provide new residential units and commercial development in the area, it is noted that the project serves to accommodate projected population growth in the County, which is anticipated to occur with or without the project. By proposing a mixed-use development adjacent to the existing Kailua-Kona urban core and in an area designated as a transit-oriented development regional center by the KCDP, the Makalapua Project District will guide growth to existing developed areas, rather than promoting sprawling, greenfield development. LT will provide necessary backbone infrastructure to serve the Makalapua Project District development. Drainage, wastewater, water, and roadway improvements will be designed to meet applicable local, State, and Federal regulations.

7. **Significantly affects a rare, threatened, or endangered species of animal or plant, or its habitat**

A Flora and Fauna Survey has been prepared by a qualified biologist to identify flora, fauna, and habitats within the proposed Makalapua Project District, paying particular attention to rare, threatened, and endangered species. The survey found no endangered plant or animal species within the project area. However, the endemic maiapilo bush, which is considered “vulnerable,” was documented. The Flora and Fauna Survey recommended that LT incorporated perseveration of maiapilo into the project scope. With that precaution undertaken, the proposed action is not anticipated to substantially affect any biological resources.

Although the Hawaiian hoary bat was not observed during the evening survey of the project area, the bats are highly mobile and there is likelihood that the bats utilize some habitats within the project site during the year. Therefore, as recommended by the Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW), trees taller than 15 feet will not be removed during pup rearing season and barbed wire fencing will not be used for the project. Similarly, lighting during and after construction will be shielded downwards at night to allow endangered seabirds to fly to and from the mountains without risk of becoming disoriented. Furthermore, although no Hawaiian seabirds were recorded during the survey, it is possible that the endangered Hawaiian Petrel, Band-rumped Storm-Petrel, and the threatened Newell’s Shearwater over-fly the project area between April and the middle of December each year in small numbers. Therefore, as recommended by the DOFAW, artificial lighting will be minimized and down shielded to avoid and/or minimize impacts to seabirds, and nighttime construction will be avoided during the seabird fledging season between September 15 and December 15.

8. **Detrimentially affects air or water quality or ambient noise levels**

Construction activities will result in short-term air quality and noise impacts. BMPs will be implemented to mitigate these impacts to acceptable levels. No long-term impacts on air, water, or ambient noise levels are anticipated after construction has been completed.

9. **Affects an environmentally sensitive area, such as flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters**

The Makalapua Project District is located in Flood Zone X, areas of minimal flood hazard. Refer to **Figure 8**. The Makalapua Project District is also located outside of the tsunami evacuation area. Refer to **Figure 9**. In addition, the project area is located outside of the 3.2-foot sea level rise exposure area. Refer to **Figure 12**.

As such, it is not likely to affect or suffer damage from being located in an environmentally sensitive area.


**10. Is contrary to the objectives and policies of the Coastal Zone Management Program and the Special Management Area Guidelines of Chapter 205A, HRS**

A review of the objectives and policies of Chapter 205A, HRS, is provided in its entirety in Section F of this Chapter, which addresses the project's relationship to the CZM considerations. Based on the foregoing analysis, the project will appropriately and adequately mitigate impacts to SMA-relevant areas of interest. Accordingly, there are no anticipated significant adverse environmental and ecological impacts attributed to the proposed project.



**ALTERNATIVES ANALYSIS**

**IV**



## **IV. ALTERNATIVES ANALYSIS**

### **A. PREFERRED ALTERNATIVE**

The proposed Makalapua Project District concept presented in Chapter I (and as reflected in **Figure 4**) represents the preferred alternative for the project and has been developed using early consultation input from both agency and community stakeholder groups.

The preferred alternative calls for approximately 600 residential units along with 150 hotel rooms across two (2) hotels, 220,900 square feet of commercial use which may include grocery, office, retail, civic/community, and food and beverage uses and a variety of open space features. Consistent with the intent of the “PD, Project District” designation being sought, the distribution of these uses may be refined within the project area, however, overall densities will be maintained.

Residential products will be designed to meet the needs of a variety of new and existing households, with the primary objective of creating a rich, diverse community by providing a wide range of choices. These will include medium- to high-density residential units in single-family and multi-family formats for sale with opportunities for rentals.

The development of the Makalapua Project District is consistent with Lili‘uokalani Trust’s (LT) guiding principles and will support LT’s mission of providing support to its beneficiaries: orphaned and other destitute children in Hawai‘i.

### **B. NO ACTION ALTERNATIVE**

The no action alternative would involve the continued underutilization of the 69.5-acre project area. The no action alternative is not deemed appropriate given its proximity to the existing Kailua-Kona urban core and the projected population and economic growth in the region. The County General Plan LUPAG designates the Project District lands as “Industrial” and “Urban Expansion” as the lands are a natural extension of Kailua Village. The no action alternative would not address the needs of the growing Kona community.

Further, the no action alternative would not provide long-term financial support for LT’s mission of providing care for orphaned and other destitute children in Hawai‘i. For these reasons, the no action alternative is not being considered.

### **C. DEFERRED ACTION ALTERNATIVE**

Similar to the “no action” alternative, the “deferred action” alternative is not deemed reasonable as it would not accommodate the anticipated growth in the region and would not provide financial support for LT’s mission of providing care for orphaned and other destitute children in Hawai‘i.

#### **D. CURRENT ZONING ALTERNATIVE**

Although the majority of the project area is currently zoned for commercial and industrial use and could be developed accordingly, residential components, including affordable housing, were incorporated into the project to make it consistent with the overall vision and intent of the Kona Community Development Plan (KCDP) for this area. The residential uses would not be allowed by current zoning. Furthermore, the proposed Makalapua Project District incorporates redevelopment and infill, mixed-use developments, and affordable housing, which are key land use trends that helped to define the land use policies and strategies in the KCDP. The addition of approximately 600 residential units will help to meet the growing need for housing in Kona, and is compatible with the surrounding area. As such, the commercial/industrial development alternative was not selected as the preferred alternative for the project.

#### **E. 2019 FINAL ENVIRONMENTAL ASSESSMENT ALTERNATIVE**

As discussed in Chapter I, LT has been engaged in planning efforts for the Makalapua Project District lands for a number of years and there were previous land use concepts presented and assessed. The Preferred Alternative presented in this EA has been modified from the Preferred Alternative discussed in the Final EA for a previous version of the Makalapua Project District published on April 23, 2019 (“the 2019 Final EA Alternative”). The 2019 Final EA Alternative included construction of 300 residential units, 220 hotel rooms, 470,000 square feet of commercial space, and 50,000 acres of community space. See **Figure 18**. Overall, the 2019 Final EA Alternative featured a larger commercial use component and fewer residential units. However, since that time, LT has reassessed its goals for the Makalapua Project District and developed the current Preferred Alternative, which prioritizes residential uses to meet the housing needs of the West Hawai`i community as well as responds to market conditions by taking into account updated market analyses.

#### **F. OTHER SITE PLAN ALTERNATIVES**

Various other site plan alternatives, including different densities and land use configurations were considered for the proposed Makalapua Project District. The evaluation of site plan alternatives generally encompassed a wide range of criteria including various physical, socio-economic, and environmental considerations. The preferred alternative was selected based on the following factors:

- Connectivity to and compatibility with existing urban areas





**Key**

- Makalapua Project District
- Commercial\* - 470,000 Square Feet
- Residential\* - 300 Dwelling Units
- Community\* - 50,000 Square Feet
- Hotel\* - 220 Rooms
- Open Space

\* Tabulations include allocations from mixed-use areas. Mixed-use areas are indicated on the diagram with a hatch of included uses.

Source: Mithun

Figure 18

Makalapua Project District  
2019 Final Environmental Assessment Alternative

NOT TO SCALE



Prepared for: Lili'uokalani Trust



QLT/Makalapua PD 1875/Site Plan/DEA

- Topographic conditions
- Infrastructure analysis
- Community needs
- Market demand analysis
- Potential impacts to the physical and socio-economic environment
- Applicable regulatory plans, policies, and controls
- Archaeological and cultural impact analysis
- Projected sea level rise



**SUMMARY OF ADVERSE  
ENVIRONMENTAL EFFECTS  
WHICH CANNOT BE AVOIDED**

**V**



## **V. SUMMARY OF ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED**

The proposed development of the Makalapua Project District will result in unavoidable construction-related environmental impacts as outlined in Chapter II. Potential effects include noise, air quality, and traffic impacts during the site preparation and construction phases of the proposed development. As previously discussed, Best Management Practices (BMPs) will be implemented to mitigate such impacts to acceptable levels. A construction traffic management plan will be prepared and implemented during construction, as may be needed.

From a long-term perspective, the proposed project will accommodate projected growth in the region through the development of a compact, mixed-use, community that is consistent with the vision set forth in the Kona Community Development Plan (KCDP). The Lili'uokalani Trust will provide necessary infrastructure to serve the development while limiting impacts on public systems and services. Drainage, wastewater, water, and roadway improvements will be designed to meet applicable local, State, and Federal regulations.



**IRREVERSIBLE AND  
IRRETRIEVABLE  
COMMITMENT  
OF RESOURCES**

**VI**



## **VI. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES**

The proposed Makalapua Project District is anticipated to result in the irreversible and irretrievable commitment of land and fiscal resources. Other resource commitments include energy, labor, water, and material resources. These commitments, however, will be minimized through use of construction BMPs and sustainable design practices. In addition, the project's use of natural resources is considered appropriate insofar as the proposed Makalapua Project District fulfills a need to accommodate future projected growth in the Kona region and the overall Hawai'i County and will also ensure continuance of LT's mission to provide services aimed at improving the welfare of orphan and other destitute children in Hawai'i.



**SIGNIFICANCE CRITERIA  
ASSESSMENT**

**VII**



## VII. SIGNIFICANCE CRITERIA ASSESSMENT

The “Significance Criteria”, Section 13 of the Department of Health Administrative Rules, Title 11, Chapter 200.1, “Environmental Impact Statement Rules”, were reviewed and analyzed to determine whether any phase of the proposed project could present significant adverse impacts to the environment. The following criteria and preliminary analysis are provided:

**1. Irrevocably commit a natural, cultural, or historic resource.**

Two (2) archaeological inventory surveys (AIS) were prepared for lands included within the proposed Makalapua Project District. A Supplemental AIS was conducted for the 110-acre Kona Commons project area, including the majority of the 69.5-acre Makalapua Project District. Eleven (11) archaeological sites containing 21 component features were identified within the Makalapua Project District. Of the 21 component features identified, only three (3) were recommended for further treatment. In accordance with Supplemental AIS recommendations, a Burial Treatment Plan was prepared for Site No. 50-10-27-18511, Feature C, which contained a burial site that was discovered in a modified lava tube and was submitted to SHPD and the Hawai'i Island Burial Council for review and determination and approved on November 08, 2019. A Data Recovery Plan was also prepared and data recovery investigations were conducted for Site No. 50-10-27-30210, Feature B lava excavation in May 2023. An End-of-Fieldwork Letter Report was prepared and submitted to the SHPD, and the SHPD accepted said report in October 2023. A Data Recovery Report was subsequently prepared and submitted to SHPD and is currently under review.

A separate AIS for LT's Urban Phase III lands was prepared and covers the 14.96-acre portion of the Makalapua Project District that is designated as “Agricultural” by the State Land Use Commission. The Urban Phase III AIS identified five (5) archaeological sites containing eight (8) component features within the Makalapua Project District, of which two (2) sites (four (4) component features) were recommended for preservation. As recommended by the Urban Phase III AIS as well as the Supplemental AIS, a Historic Preservation Plan was prepared for the portion of the historic trail that likely connected the Mamalahoa Trail with a shoreline trail (Site No. 50-10-27-30287), modified lava sinks (Site No. 50-10-27-13260), and possible ceremonial structure (Site No. 50-10-27-13261). The Historic Preservation Plan was accepted by the SHPD on March 06, 2023.

Additionally, LT prepared an Archaeological Monitoring Plan (AMP) for the entire Makalapua Project District. The AMP was submitted and approved by SHPD. In accordance with Section 6E-43.6, HRS and Chapter 13-300, HAR, if any significant cultural deposits or human skeletal remains are encountered during



ground altering activity conducted as part of the Makalapua Project District, work will stop in the immediate vicinity and SHPD will be contacted to determine the appropriate level of mitigation.

The Cultural Impact Assessment (CIA) concluded that the proposed project will have limited impact on Hawaiian cultural resources, beliefs, and practices, noting that none were identified within the Makalapua Project District. Based on comments received on the Draft Environmental Assessment (EA), the CIA was updated to include an independent section for the project's Ka Pa'akai Analysis. The analysis indicated the presence of several valued cultural and historic resources. Based on the presence of these resources, the report concluded that "development in the project area will impact Hawaiian cultural resources and practices within the project area such as water, other wahi kūpuna, and plant resources associated with cultural practices as well as resources reliant on water both makai and mauka. The proposed project also has the potential to impact additional undocumented burials and wahi kupuna in the project area".

Mitigation measures recommended by the CIA include cultural monitors present for any land modifications, greater engagement with Hawaiian community organizations such as the Royal Order of Kamehameha I, an ahupua'a approach to the proposed project to promote opportunities for cultural space and activity, and a community based approach to create opportunities to foster a sense of belonging and kinship. In addition, based on the consultant experience, the CIA recommends design plans to conserve as much cultural landscape as possible, additional vigilance by cultural monitors for iwi kupuna, archaeological monitoring to avoid impacts to known and potential historic properties, avoiding negative impacts to native plants, and recognizing Hawaiian traditions and customary rights to water. LT will implement these mitigation measures as much as practical.

Biological resources identified in the area as part of a Flora Fauna Survey did not include rare or threatened species, nor are there any sensitive natural environments (e.g., wetlands or streams) in the immediate vicinity of the project site. Nevertheless, mitigation measures to preserve the endemic maiapilo and to protect the endangered Hawaiian hoary bat and Hawaiian seabirds will be incorporated into the project, as appropriate.

## **2. Curtail the range of beneficial uses of the environment.**

The proposed Makalapua Project District improves, rather than curtails, the range of beneficial uses of the environment. The project area is primarily vacant and underutilized, with no current or recent history of active agricultural cultivation. The proposed Makalapua Project District responds to the need to provide housing and economic growth opportunities for the County's growing population. The project

will serve the varied housing and commercial needs of the region at an attractive growth location adjacent to the existing Kailua-Kona town. As envisioned by the Kona Community Development Plan (KCDP), the Makalapua Project District will serve as a transit-oriented development regional center and a natural extension of Kailua Village.

**3. Conflict with the state’s environmental policies or long-term environmental goals established by law.**

The Makalapua Project District does not conflict with State’s long-term environmental policies, goals and guidelines, including those established in Chapter 343, HRS.

**4. Have a substantial adverse effect on the economic welfare, social welfare, or cultural practices of the community and State.**

The proposed Makalapua Project District will generate positive economic impacts associated with construction-related spending and employment during the implementation of the project. Furthermore, the proposed Makalapua Project District responds to the need to provide housing and economic growth opportunities for the County’s growing population. The project will serve to meet the varied housing, commercial, and lodging needs of the region at an attractive growth location adjacent to the existing Kailua-Kona town. Upon completion, residents of the Makalapua Project District will contribute to the local economy through household spending on goods and services, while commercial development will support new employment and business opportunities in the region.

Income generated by Lili’uokalani Trust’s (LT) lands, which will include the Makalapua Project District, supports its programs serving orphan and destitute children in Hawai’i.

A CIA prepared for the project concluded that the proposed Makalapua Project District development will have limited impact on Hawaiian cultural resources, beliefs, and practices, noting that none were identified within the Makalapua Project District. Based on comments received on the Draft EA, the CIA was updated to include an independent section for the project’s Ka Pa’akai Analysis. The analysis indicated the presence of several valued resources. Based on the presence of these resources, the analysis concluded that development in the project area will impact Hawaiian cultural resources and practices within the project area such as water, other wahi kūpuna, and plant resources associated with cultural practices as well as resources reliant on water both *ma kai* and *ma uka*. The proposed project has the potential to impact additional undocumented burials and wahi kupuna in the project area. The Ka Pa’akai Analysis identified mitigation

measures, such as cultural monitoring and greater engagement with Hawaiian Community organizations, and LT will implement the recommended mitigation measures as much as practical.

**5. Have a substantial adverse effect on public health.**

No long-term adverse impacts to public health are anticipated as a result of the proposed project.

There will be short-term impacts related to dust and noise generated during the site preparation and construction phases. These potential air quality and noise impacts will be mitigated through the utilization of appropriate Best Management Practices (BMPs).

All infrastructure within the Makalapua Project District, including water, wastewater, and electricity, will be developed in conformance with applicable local, State, and Federal regulations to safeguard public health.

**6. Involve adverse secondary impacts, such as population changes or effects on public facilities.**

The proposed Makalapua Project District is not expected to result in substantial secondary impacts. Hawai'i County's population is projected to grow over the next 20 years regardless of whether the proposed project is built, and demands on infrastructure and public services will increase accordingly. The proposed project will accommodate projected growth in the region through the development of a compact, mixed-use, transit oriented community that is consistent with the vision set forth in the KCDP. LT will provide necessary infrastructure to serve the development while limiting the impacts on public systems and services.

**7. Involve a substantial degradation of environmental quality.**

There will be short-term impacts related to dust and noise generated during the site preparation and construction phases. These potential air quality and noise impacts will be mitigated through the utilization of appropriate BMPs. No long-term impacts to environmental quality are anticipated.

**8. Be individually limited but cumulatively have substantial adverse effect upon the environment or involve a commitment for larger actions.**

As previously discussed, the proposed Makalapua Project District is not part of a larger action, but will be developed in the context of a pattern of overall change and growth in the region given the other planned residential and commercial development projects in West Hawai'i.

The cumulative impacts of the Makalapua Project District, together with other reasonably foreseeable actions such as the adjacent, but separate, Keahuolū Land Plan, Kailua Park Master Plan, Kamakana Villages, and La'i'Ōpua Master Plan will likely include increased population and greater demands on public infrastructure. While the Makalapua Project District will provide new residential units and commercial development in the area, it is noted that the project serves to accommodate the current residents as well as the projected population growth in the County, which is anticipated to occur with or without the project. By proposing a mixed-use development adjacent to the existing Kailua-Kona urban core and in an area designated as a transit-oriented development regional center by the KCDP, the Makalapua Project District will guide growth to existing developed areas, rather than promoting sprawling, greenfield development. LT will provide necessary backbone infrastructure to serve the Makalapua Project District development. Drainage, wastewater, water, and roadway improvements will be designed to meet applicable local, State, and Federal regulations.

9. **Have a substantial adverse effect on a rare, threatened, or endangered species, or its habitat.**

A Flora and Fauna Survey has been prepared by a qualified biologist to identify flora, fauna, and habitats within the proposed Makalapua Project District, paying particular attention to rare, threatened, and endangered species. The surveys found no endangered plant or animal species within the project area. However, the endemic maiapilo, which has been deemed “vulnerable”, was documented. The Flora and Fauna Survey recommended that LT incorporate preservation of maiapilo into the project.

In addition, although the Hawaiian hoary bat was not observed during the survey of the project area, the bats are highly mobile and there is likelihood that the bats utilize some habitats within the project site during the year. As recommended by the Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW), trees taller than 15 feet will not be removed during pup rearing season and barbed wire fencing will not be used for the proposed project. Similarly, lighting for the project will be shielded downwards at night to protect endangered seabirds from becoming disoriented as they fly to and from the mountains.

10. **Have a substantial adverse effect on air or water quality or ambient noise levels.**

Construction activities will result in short-term air quality and noise impacts. BMPs will be implemented to mitigate these impacts to acceptable levels. From a long-term perspective, permanent drainage improvements will be designed in accordance with applicable County standards and LID strategies, such as

permeable paving systems, bio-swales and bio-filtration for stormwater management, are being considered for the proposed project to minimize pollutants from entering the ground and nearshore waters. No long-term impacts on air, water, or ambient noise levels are anticipated after construction has been completed.

11. **Have a substantial adverse effect on or be likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, sea level rise exposure area, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.**

The Makalapua Project District is located in Flood Zone X, areas of minimal flood hazard. Refer to **Figure 8**. The Makalapua Project District is also located outside of the tsunami evacuation area. Refer to **Figure 9**. The project area is also located inland of the 3.2-foot sea level rise exposure area. Refer to **Figure 12**. As such, it is not likely to affect or suffer damage from being located in an environmentally sensitive area. The Makalapua Project District will improve Makala Boulevard and Kuakini Highway and include the development of new internal roads within the project, which will provide improved circulation in the area and facilitate evacuation routes for areas within the tsunami evacuation zone makai of the project site.

12. **Have a substantial adverse effect on scenic vistas and viewplanes, during day or night, identified in county or state plans or studies.**

Keahuolū, located on the western slopes of Hualālai, offers beautiful scenic views. Scenic resources in the vicinity include the Pacific Ocean to the west and the Hualālai volcano to the east. The Makalapua Project District is adjacent to the Kona Industrial Subdivision and Kona Commons Shopping Center and is not located within an identified scenic vista or view plane. As mentioned previously, The Hawai'i County General Plan's Land Use Pattern Allocation Guide (LUPAG) designates the project area as "Industrial" and "Urban Expansion". Therefore, given the surrounding commercial and industrial uses and LUPAG designation, significant adverse impacts to the visual character of the area are not anticipated. LT is committed to developing the project in a manner which will respect the architectural and landscape values of the island.

13. **Require substantial energy consumption or emit substantial greenhouse gases.**

The proposed Makalapua Project District will involve a commitment of fuel for construction equipment, vehicles, and machinery during the site preparation and construction phase. Additionally, because the proposed Makalapua Project District consists of new construction, there is significant opportunity to incorporate energy conservation and efficiency measures. Passive energy conservation strategies

that are being considered include architectural shading for reducing heat gain, maximizing natural daylighting of interior spaces, building orientation and fenestration for natural ventilation, and landscape strategies to provide summer shade.

The proposed project will generate greenhouse gas (GHG) through construction activities, energy use, and new vehicle trips during the operation phase of the project. A Greenhouse Gas Emissions Impact Study for the Makalapua Project District was prepared and concluded that estimated GHG emissions during construction and the operational phase of the Makalapua Project District are considered to not be significant when compared with the projections for the State of Hawai'i. A variety of mitigation efforts such as promoting multi-modal transportation options to make the community walkable and bikeable, passive energy creation, water conservation, on-site storm water management, green spaces, and the use of native and drought tolerant plant species are being considered for implementation, which will help reduce GHG emissions from the project.

Based on the foregoing findings, the Makalapua Project District is not expected to generate any significant adverse impacts. Accordingly, this Final Environmental Assessment (EA) for the project will be published in the Environmental Review Program (ERP) Environmental Notice as a Finding of No Significant Impact (FONSI).



**LIST OF PERMITS  
AND APPROVALS**

**VIII**



## VIII. LIST OF PERMITS AND APPROVALS

### **REQUIRED PERMITS AND APPROVALS**

The following permits and approvals will be required prior to the implementation of the proposed Makalapua Project District:


#### **State of Hawai'i**

1. State Land Use District Boundary Amendment (DBA) (processed by County of Hawai'i) (Hawai'i Revised Statutes (HRS) 205-3.1(c) and Hawai'i County Code (HCC), Chapter 28)
2. Environmental Assessment, Finding of No Significant Impact (FONSI) (Chapter 343, HRS)
3. National Pollutant Discharge Elimination System (NPDES) Permit (Hawai'i Administrative Rules (HAR) 11-55, Water Pollution Control)
4. Community Noise Permits, as applicable (HAR, Chapter 11-46, Community Noise Control)
5. State Department of Transportation Permits (i.e. Permit to Perform Work Upon State Highways)


#### **County of Hawai'i**

1. Change of Zone (Project District) (HCC, Chapter 25)
2. Special Management Area (SMA) Use Permit (HRS 205A)
3. Subdivision Approval (HCC, Chapter 23)
4. Construction Approvals (Grading/Building Permits) (HCC, Chapter 5)
5. Right to Perform Work Within a County Right-of-Way
6. County Design Center Review





**AGENCIES AND ORGANIZATIONS  
CONSULTED DURING  
THE PREPARATION OF THE  
DRAFT ENVIRONMENTAL  
ASSESSMENT; LETTERS  
RECEIVED AND RESPONSES  
TO SUBSTANTIVE COMMENTS**



**IX**

# IX. AGENCIES AND ORGANIZATIONS CONSULTED DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL ASSESSMENT; LETTERS RECEIVED AND RESPONSES TO SUBSTANTIVE COMMENTS

Throughout the planning process for the Makalapua Project District, LT has engaged the community as well as elected officials and County of Hawai'i departments and staff in numerous outreach meetings and presentations. Among these were the convening of a Community Advisory Group, a cross-section of neighboring property owners, business owners, community leaders, and Keahuolū lineal descendants with whom LT has engaged in the past to share information about ongoing projects and natural resources initiatives. The purpose of this outreach effort was to update the various stakeholders on the project and share information on the planning process, technical studies, and the Draft Environmental Assessment and entitlement processes to be undertaken. LT intends to continue its outreach efforts throughout the entitlement process for the Makalapua Project District project.

The following agencies, organizations, community groups and individuals were consulted during the preparation of the Draft Environmental Assessment:

## Federal Agencies

1. Mr. Gerald Gregory, District Conservationist  
U.S. Department of Agriculture-NRCS,  
Natural Resources Conservation Service  
77 Ho'okele Street, Suite 202  
Kahului, HI 96732
2. Mr. Ryan Okahara, Field Office Director  
U. S. Department of Housing and Urban Development  
1132 Bishop Street, Suite 1400  
Honolulu, HI 96813-4918
3. Ms. Jen Martin, Interim Chief  
U.S. Department of the Army,  
Regulatory Branch,  
U.S. Army Corps of Engineers,  
Honolulu District Regulatory Branch,  
Building 230  
Fort Shafter, HI 96858-5440  
Via email: [CEPOH-RO@usace.army.mil](mailto:CEPOH-RO@usace.army.mil)
4. Ms. Jan Yukumoto  
U.S. Environmental Protection Agency  
Region 9  
Pacific Islands Contact Office  
P.O. Box 50003  
300 Ala Moana Blvd., Room 5124  
Honolulu, HI 96850
5. Mr. Earl Campbell, Project Leader  
U.S. Fish and Wildlife Service –  
Pacific Islands Fish and Wildlife Office  
300 Ala Moana Blvd., Rm. 3-122  
Honolulu, HI 96850  
Via email: [pifwo\\_admin@fws.gov](mailto:pifwo_admin@fws.gov)

## State of Hawai'i

6. Senator Dru Mamo Kanuha  
Senate District 3  
Kona, Ka'ū, Volcano  
Hawai'i State Capitol, Room 206  
415 South Beretania St.  
Honolulu, HI 96813
7. Representative Kirstin Kahaloa  
House District 6  
Hōnaunau, Nāpo'opo'o, Captain Cook,  
Kealakekua, Keauhou, Hōlualoa,  
Kailua-Kona  
Hawai'i State Capitol Room 134  
415 South Beretania St.  
Honolulu, HI 96813
8. Mr. Keith Regan, Comptroller  
Department of Accounting and General  
Services  
State of Hawai'i  
1151 Punchbowl Street, #426  
Honolulu, HI 96813
9. Ms. Sharon Hurd, Chair  
Department of Agriculture  
State of Hawai'i  
1428 South King Street  
Honolulu, HI 96814-2512
10. Mr. James Kunane Tokioka, Director  
Department of Business, Economic  
Development & Tourism (HHFDC)  
State of Hawai'i  
P.O. Box 2359  
Honolulu, HI 96804
11. Ms. Catherine Awakuni Colon, Director  
Department of Commerce and  
Consumer Affairs  
State of Hawai'i  
335 Merchant Street  
Honolulu, HI 96813
12. Mr. Keith Hayashi, Superintendent  
Department of Education  
State of Hawai'i  
P. O. Box 2360  
Honolulu, HI 96804
13. Mr. Kali Watson, Chair  
Department of Hawaiian Home Lands  
State of Hawai'i  
P. O. Box 1879  
Honolulu, HI 96805
14. Dr. Kenneth S. Fink, MD, MGA, MPH,  
Director  
Department of Health  
State of Hawai'i  
1250 Punchbowl St., Room 325  
Honolulu, HI 96813
15. Mr. Alec Wong, P.E., Chief  
Department of Health, Clean Water  
Branch  
State of Hawai'i  
Environmental Management Division  
Hale Ola, Room 225  
2827 Waimano Home Road  
Pearl City, HI 96782
16. Ms. Kathleen Ho, Deputy Director  
Department of Health,  
Environmental Health Administration  
State of Hawai'i  
1250 Punchbowl Street  
Honolulu, HI 96813
17. Ms. Sina Pruder, P.E., Chief  
Department of Health, Wastewater  
Branch  
State of Hawai'i  
Environmental Management Division  
Hale Ola Building  
2827 Waimano Home Road, Room 207  
Pearl City, HI 96782
18. State of Hawai'i  
Environmental Management Division  
Department of Health, Kona Sanitation  
Branch  
Keakalanui Building  
79-1020 Haukapila Street, Room 115  
Kona, HI 96750
19. Ms. Lene Ichinotsubo  
Department of Health, Solid and  
Hazardous Waste Branch  
State of Hawai'i  
Environmental Management Division  
2827 Waimano Home Road, Suite 100  
Pearl City, HI 96782-1407

20. Ms. Dawn N. S. Chang, Chairperson  
Department of Land and Natural Resources  
State of Hawai'i  
P. O. Box 621  
Honolulu, HI 96809  
Via email: [dlnr@hawaii.gov](mailto:dlnr@hawaii.gov) and [dlnr.land@hawaii.gov](mailto:dlnr.land@hawaii.gov)
21. Mr. Dean Uyeno,  
Interim Deputy Director  
Department of Land and Natural Resources  
Commission on Water Resource Management  
State of Hawai'i  
P.O. Box 621  
Honolulu, Hawaii 96809  
Via email: [dlnr@hawaii.gov](mailto:dlnr@hawaii.gov) and [dlnr.land@hawaii.gov](mailto:dlnr.land@hawaii.gov)
22. Mr. Ed Sniffen, Director  
Department of Transportation  
State of Hawai'i  
869 Punchbowl Street, Room 509  
Honolulu, HI 96813-5097
23. Mr. Dean Minakami, Interim Executive Director  
Hawai'i Housing Finance and Development Corporation (HHFDC)  
State of Hawai'i  
677 Queen Street  
Honolulu, HI 96813
24. Mr. Colin Kippen, Interim Chief Executive Officer  
Office of Hawaiian Affairs  
State of Hawai'i  
560 N. Nimitz Highway, Suite 200  
Honolulu, HI 96817
25. Ms. Mary Alice Evans, Acting Director  
Office of Planning and Sustainable Development, Environmental Review Program  
State of Hawai'i  
235 South Beretania Street, Room 702  
Honolulu, HI 96813
26. Mr. Dan Orodener, Executive Officer  
Land Use Commission, DBEDT  
State of Hawai'i  
P.O. Box 2359  
Honolulu, HI 96804

## County of Hawai'i

27. Honorable Mitch Roth, Mayor  
Mayor's Office - West Hawai'i  
County of Hawai'i  
74-5044 Ane Keohokalole Hwy., Bldg. C  
Kailua-Kona, HI 96740
28. Honorable Dr. Holeka Goro Inaba,  
Council Vice Chair  
County of Hawai'i, District 8  
(North Kona)  
West Hawaii Civic Center  
74-5044 Ane Keohokālole Hwy,  
Building A  
Kailua-Kona, HI 96740
29. Ms. Rebecca Villegas, Councilmember  
County of Hawai'i, District 7  
(Portion of Kona and South Kona)  
West Hawaii Civic Center  
74-5044 Ane Keohokālole Hwy,  
Building A  
Kailua-Kona, HI 96740
30. Mr. Talmadge Magno, Administrator  
Civil Defense Agency  
County of Hawai'i  
920 Ululani Street  
Hilo, HI 96720
31. Mr. Ramzi Mansour, Director  
Department of Environmental Management  
County of Hawai'i  
25 Aupuni Street  
Hilo, HI 96720
32. Mr. Maurice Messina, Director  
Department of Parks and Recreation  
County of Hawai'i  
101 Pauahi Street, Suite 6  
Hilo, HI 96720
33. Mr. Stephen Ikaika Rodenhurst, P.E.,  
Director  
Department of Public Works  
County of Hawai'i  
101 Pauahi Street, Suite 7  
Hilo, HI 96720

- |  |  |
|--|--|
| <p>34. Mr. Keith Okamoto, P.E., Manager-Chief Engineer<br/>Department of Water Supply<br/>County of Hawai'i<br/>345 Keuanao'a Street, Suite 20<br/>Hilo, HI 96720</p> <p>35. Chief Kazuo Todd, Fire Chief<br/>Fire Department<br/>County of Hawai'i<br/>25 Aupuni Street, Suite 2501<br/>Hilo, HI 96720</p> <p>36. Mr. Victor Kandle, Mass Transit Administrator<br/>Mass Transit Agency<br/>County of Hawai'i<br/>25 Aupuni Street<br/>Hilo, HI 96720</p> <p>37. Ms. Susan Kunz, Housing Administrator<br/>Office of Housing and Community Development<br/>County of Hawai'i<br/>1990 Kino'ole Street, Suite 102<br/>Hilo, HI 96720</p> <p>38. Mr. Zendo Kern, Director<br/>Planning Department<br/>County of Hawai'i<br/>101 Pauahi Street, Suite 3<br/>Hilo, HI 96720</p> <p>39. Chief Benjamin Moszkowicz, Police Chief<br/>Police Department<br/>County of Hawai'i<br/>349 Kapi'olani Street<br/>Hilo, HI 96720</p> | <p>43. The Gas Company<br/>945 Kalaniana'ole Street<br/>Hilo, HI 96720</p> <p>44. C/O Fred Housel<br/>Community Enterprises<br/>74-5063 Tomi Tomi Drive<br/>Kailua-Kona, HI 96740</p> <p>45. People's Alliance for Trails Hawai'i (PATH)<br/>P.O. Box 621<br/>Kailua-Kona, HI 96740</p> <p>46. Superintendent Kaloko-Honokohau National Historical Park<br/>National Park Service,<br/>73-4786 Kanalani Street #14<br/>Kailua-Kona, HI 96740</p> <p>47. Kona Village Business Improvement District<br/>75-5751 Kuakini Highway #202<br/>Kailua-Kona, HI 96740</p> <p>48. Ms. Nani Barretto and Ms. Elizabeth Pickett<br/>Co-Executive Directors<br/>Hawai'i Wildfire Management Organization<br/>65-1279 Kawaihae Road<br/>Kamuela, HI 96743</p> |
|--|--|

**County of Hawai'i Organizatons**

40. Ms. Jacqui Hoover  
Hawai'i Leeward Planning Conference  
P.O. Box 2159  
Kamuela, HI 96743
41. Hawai'i Electric Light Company, Inc,  
P.O. Box 1027  
Hilo, HI 96721-1027
42. Oceanic Time Warner Cable  
548 Kanoelehua Avenue  
Hilo, HI 96720



## United States Department of the Interior

NATIONAL PARK SERVICE  
 Kaloko-Honokōhau National Historical Park  
 73-4786 Kanalani Street, # 14  
 Kailua-Kona, Hawai'i 96740



IN REPLY REFER TO:  
 I.D. (KAHO 2023-3)

Munekiyo Hiraga  
 Attention: Yukino Uchiyama, AICP  
 305 High Street, Suite 104  
 Wailuku, Hawai'i 96793

Dear Ms. Uchiyama:

Thank you for the opportunity to provide input on the development of a Draft Environmental Assessment (EA) for the proposed Makalapua Project District, Keahuolū, Hawai'i. The Lili'uokalani Trust, a private operating foundation dedicated to improving the welfare of orphan and other destitute children in Hawai'i, proposes to develop, enhance and refine approximately 69.54 acres of its trust portfolio lands in Kailua-Kona on the island of Hawai'i. The proposed project is about two miles south of the park and will approximately include:

- 600 residential units with a mix of single-family and multi-family product types;
- 220,900 square feet of commercial use which may include grocery, office, retail, civic/community, and food and beverage uses;
- two hotels providing approximately 150 hotel rooms; and
- open space features.

The NPS has concerns about the project's potential effects to the coastal natural and cultural resources of Kaloko-Honokōhau National Historical Park. Water, air, fish, birds, insects, and contaminants all can move throughout these systems. We suggest the draft EA include the information and analysis needed for readers to understand potential impacts from runoff, wastewater disposal, groundwater withdrawals, and outdoor lighting to the natural and cultural resources at Kaloko-Honokōhau NHP and other coastal areas in the vicinity of the proposed project.

Congress established Kaloko-Honokōhau National Historical Park in 1978 to preserve, interpret, and perpetuate traditional native Hawaiian activities and culture by protecting the cultural and natural resources within the park (16 U.S.C. § 396d(a)). The Park contains more than 450 known archeological and cultural sites, including several heiau, networks of ancient and historic trails, seawalls, more than 180 anchialine pools, two Hawaiian fishponds with associated wetlands, and a fish trap. The land and waters within the park provide habitat for 17 federally listed, and candidate species for listing, under the Endangered Species Act. 'Aimakapā Fishpond and wetland are listed as "Core Wetlands" by the U.S. Fish & Wildlife Service for the recovery of two endangered waterbird species, the Hawaiian stilt (*Himantopus mexicanus knudseni*) and the Hawaiian coot (*Fulica americana alai*) and are important habitat for migratory waterfowl (USFWS 2011).

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**EXPERIENCE YOUR AMERICA**

The National Park Service cares for special places saved by the American people so that all may experience our heritage.

Kaloko Fishpond is a loko kuapā. It is being restored so that it can be managed as a traditional Hawaiian fishpond. The park encompasses 596 acres of marine waters and coral reef habitat beyond its fishponds and pools. Fresh groundwater discharges to all the park's inland and nearshore waters and supports culturally important and rare native plants and animals, and the cultural practices and recreational activities that rely upon them. Approximately 291,000 visitors per year visit the Park (<https://irma.nps.gov/Stats/>). Local residents, cultural practitioners, and visitors from around the world come to experience Kaloko-Honokōhau's unique seascape, cultural and natural history, and to understand and exercise traditional Hawaiian practices.

### **Non-Point Source Pollution and Surface Water Drainage**

The NPS suggests the draft EA address how polluted runoff from parking lots, driveways, and other surfaces will be controlled and treated. The proposed project is located in highly permeable lava with few accumulated soils. Rain and runoff carry pollutants quickly to groundwater, to coastal anchialine pools, and into nearshore waters. Although average rainfall is ~20 inches per year, rainfall accumulation is typically concentrated in a few intense events that cause a pulse of pollution flushing to drainage systems, to the water table, and into nearshore waters.

For over a decade, Hawai'i County and the Hawai'i Land Use Commission have recognized the need to implement additional measures to control nonpoint source pollution flowing into the Park's inland and nearshore waters and surrounding areas (LUC Docket A00-732; COH Ord 02-114 and 04-110). Standard county, state, and federal regulations for drainage wells (i.e., dry wells) are designed to address flood control but not to prevent polluted surface water runoff from impacting the inland and coastal waters. We suggest best management practices are discussed in the draft EA.

### **Wastewater Treatment**

The NPS recommends that the draft EA thoroughly analyzes the direct, indirect, and cumulative impacts of the disposal of treated wastewater on aquatic and marine ecosystems. It is not clear at this time if the proposed project will be connected to the Kealakehe Wastewater Treatment Plant. If there is not a connection, we also recommend that the EA analyze the alternative treatment facility's ability to adequately remove nutrients, pharmaceuticals and personal care products, and function as designed beyond the initial phase of operation.

### **Potable and Non-Potable Water Systems**

The NPS suggests the draft EA identifies the sources of drinking and irrigation water for the project, and analyzes direct and cumulative impacts of groundwater withdrawals on the park's groundwater-dependent cultural and natural resources. The analysis might include details and analysis of the proposal's water requirements and of well location, and how they both cumulatively contribute to the current and future usage of groundwater in the aquifer system.

### **Nighttime Lighting**

The draft EA should address impacts to the dark night skies from project lighting. Night skies unencumbered by light pollution are vital to the protection of wilderness character, fundamental

to the historical and cultural context, and critical for park wildlife. This project's contribution to the cumulative night-sky impacts to Kaloko-Honokōhau NHP should be analyzed.

### **Cumulative Impacts**

The proposed project will contribute to the growing cumulative impacts from development adjacent to the park and in the surrounding area. The NPS recommends the draft EA include a detailed analysis of the proposed project's contributions to cumulative impacts from development near the park and along the Kona coast, with a focus on the topics listed above.

The Queen Lili'uokalani Trust and the National Park Service share a commitment to protect Hawaii's unique and fragile natural and cultural resources. We look forward to collaborating with you on this project. For questions and additional information, please contact Dr. Jeff Zimpfer of my staff (808-329-6881 x1500 or [jeff\\_zimpfer@nps.gov](mailto:jeff_zimpfer@nps.gov)).

Sincerely,

**NANCY  
HENDRICKS**

Nancy Hendricks  
Acting Superintendent

Digitally signed by NANCY  
HENDRICKS  
Date: 2023.09.19 13:25:15  
-10'00'

### **Reference**

U.S. Fish and Wildlife Service. 2011. Recovery Plan for Hawaiian Waterbirds, Second Revision  
U.S. Fish and Wildlife Service, Portland, Oregon.  
<http://www.fws.gov/pacific/ecoservices/endangered/recovery/plans.html>





February 28, 2024

Nancy Hendricks  
United States Department of the Interior  
National Parks Service  
73-4786 Kanalani St. #14  
Kailua-Kona, Hawai'i 96740

SUBJECT: Early Consultation for Proposed Makalapua Project District Project;  
Kailua-Kona, County of Hawai'i, Hawai'i

Dear Ms. Hendricks:

Thank you for your letter dated September 25, 2023, providing early consultation comments on the Proposed Makalapua Project District. On behalf of Lili'uokalani Trust, we offer the following information in response to the comments received.

**Non-Point Source Pollution and Surface Water Drainage**

**Comment**

*The NPS suggests the draft EA address how polluted runoff from parking lots, driveways, and other surfaces will be controlled and treated. The proposed project is located in highly permeable lava with few accumulated soils. Rain and runoff carry pollutants quickly to groundwater, to coastal anchialine pools, and into nearshore waters. Although average rainfall is ~20 inches per year, rainfall accumulation is typically concentrated in a few intense events that cause a pulse of pollution flushing to drainage systems, to the water table, and into nearshore waters.*

*For over a decade, Hawai'i County and the Hawai'i Land Use Commission have recognized the need to implement additional measures to control nonpoint source pollution flowing into the Park's inland and nearshore waters and surrounding areas (LUC Docket A00-732; COH Ord 02-114 and 04-110). Standard county, state, and federal regulations for drainage wells (i.e., drywells) are designed to address flood control but not to prevent polluted surface water runoff from impacting the inland and coastal waters. We suggest best management practices are discussed in the draft EA.*

**Response:** During a November 14, 2023 meeting with the National Park Service (NPS), concerns were expressed for oil and grease from vehicles. Possible treatment methods to be considered were discussed including vegetated swales, absorbent storm drain filters, and utilizing green space to allow pollutants to settle out of stormwater prior to entering drywells. An Infrastructure Report will be prepared for the proposed project and will include considerations for how polluted runoff could be controlled and treated. The Infrastructure Report will be discussed and included in the Draft Environmental Assessment (EA). In addition, a National Pollutant Discharge Elimination System (NPDES) permit will be obtained prior to construction.

### **Wastewater Treatment**

#### **Comment**

*The NPS recommends that the draft EA thoroughly analyzes the direct, indirect, and cumulative impacts of the disposal of treated wastewater on aquatic and marine ecosystems. It is not clear at this time if the proposed project will be connected to the Kealakehe Wastewater Treatment Plant. If there is not a connection, we also recommend that the EA analyze the alternative treatment facility's ability to adequately remove nutrients, pharmaceuticals and personal care products, and function as designed beyond the initial phase of operation*

**Response:** During the November 14, 2023 meeting with NPS, the project team confirmed that the project will connect to the Kealakehe Wastewater Treatment Plant. NPS had no further comments.

### **Potable and Non-Potable Water Systems**

#### **Comment**

*The NPS suggests the draft EA identifies the sources of drinking and irrigation water for the project, and analyzes direct and cumulative impacts of groundwater withdrawals on the park's groundwater-dependent cultural and natural resources. The analysis might include details and analysis of the proposal's water requirements and of well location, and how they both cumulatively contribute to the current and future usage of groundwater in the aquifer system.*

**Response:** The water source for Makalapua Project District will be the Keauhou aquifer. Lili'uokalani Trust has a bank of water credits that will be tapped for Makalapua Project District. Lili'uokalani Trust is also in the process of developing a new source to supplement the credits. Lili'uokalani Trust will continue to consult with NPS on the new source and its potential impacts.

## **Nighttime Lighting**

### **Comment**

*The draft EA should address impacts to the dark night skies from project lighting. Night skies unencumbered by light pollution are vital to the protection of wilderness character, fundamental to the historical and cultural context, and critical for park wildlife. This project's contribution to the cumulative night-sky impacts to Kaloko-Honokohau NHP should be analyzed.*

**Response:** Construction is not anticipated to occur during night time, and therefore, no adverse light pollution impacts are anticipated to native birds or bats during the construction period. After construction, the Makalapua Project District will be compliant with all nighttime lighting ordinances and regulations.

Thank you again for your participation in the Chapter 343, Hawai'i Revised Statutes environmental review process. A copy of your letter and this response will be included in the Draft Environmental Assessment for this project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uokalani Trust  
Keith Uemura, Park Engineering

K:\DATA\ALT\Makalapua PD 1875\ECL 2023\ECL Response Letters\DOI.docx



**DEPARTMENT OF THE ARMY**  
HONOLULU DISTRICT, U.S. ARMY CORPS OF ENGINEERS  
REGULATORY OFFICE  
FORT SHAFTER, HAWAII 96858-5440

September 8, 2023

SUBJECT: Approved Jurisdictional Determination and No Permit Required,  
DA File No. POH-2016-00097

Bryan Esmeralda  
Lili'uonamoku Trust  
1100 Alakea Street, Suite 1100  
Honolulu, HI 96813

Dear Mr. Esmeralda:

The U.S. Army Corps of Engineers – Honolulu District, Regulatory Office (Corps) received a request from Munekiyo Hiraga, on behalf of the Lili'uonamoku Trust, for review and comments of the proposed Makalapua Project located in Kailua-Kona, Island of Hawaii, Hawaii. The request has been assigned DA file number POH-2016-00097. Please reference this number in all future correspondence with our office relating to this action.

The review area for this AJD is identified as the approximately 69.54 acres of mixed-use lands consisting of Tax Map Keys (TMKs): (3) 7-4-008:002 (portion), (3) 7-4-010:009, 010, (3) 7-4-025:001, 002, 003, 005, 015, and 021 and is shown on the enclosed map (Enclosure 1).

Based on our review of the information provided, dated September 1, 2023, the Corps has determined the site does not contain waters of the U.S., including wetlands or navigable waters of the U.S., as defined by 33 CFR Parts 328 and 329, respectively. Therefore, a DA permit under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899 is not required.

This AJD is valid for a period of five (5) years from the date of the AJD form, unless new information supporting a revision is provided to us before the expiration date. The basis for this determination can be found in the enclosed AJD form (Enclosure 2). Additionally, a Notification of Administrative Appeal Options and Process and Request for Appeal form regarding this AJD (see section labeled "Approved Jurisdictional Determination") is enclosed (Enclosure 3).

While a DA permit is not required for your proposed project, you are responsible for obtaining all other applicable Federal, state, or local authorizations required by law.

- 2 -

Thank you for your cooperation with the Honolulu District Regulatory Program. If you have any questions related to this determination, please contact me at 808-835-4107 or via e-mail at [Cristian.J.Cayanan@usace.army.mil](mailto:Cristian.J.Cayanan@usace.army.mil). You are encouraged to provide comments on your experience with the Honolulu District Regulatory Office by accessing our web-based customer survey form at <https://regulatory.ops.usace.army.mil/ords/f?p=136:4>. For additional information about our Regulatory Program, please visit our web site at <https://www.poh.usace.army.mil/Missions/Regulatory.aspx>.

Sincerely,

A handwritten signature in black ink, appearing to read 'CJ Cayanan', with a stylized flourish at the end.

CJ Cayanan  
Regulatory Specialist

Enclosure

cc:

Yukino Uchiyama, Munekiyo Hiraga [yukino@munekiyohiraga.com](mailto:yukino@munekiyohiraga.com)

POH-2016-00097

Review Area

The outlined area consists of TMKs (3) 7-4-008:002 (portion), (3) 7-4-010:009, 010, (3) 7-4-025:001, 002, 003, 005, 015, and 021.

1000 ft



**Legend**

- POH-2016-00097 Makalapua Project





US ARMY CORPS OF ENGINEERS (USACE)  
REGULATORY PROGRAM  
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)  
2023 RULE

OMB Control Number: 0710-0024  
Expiration Date: 09/30/2023

## AGENCY DISCLOSURE NOTICE

The public reporting burden for this collection of information, 0710-0024, is estimated to average 4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at [whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil](mailto:whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

### I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 9/8/2023

ORM Project Name: [Makalapua Project District Mixed Use Development, Kailua-Kona, Hawaii](#)

ORM Identification Number: [POH-2016-00097](#)

- Other sites (e.g., offsite mitigation sites, disposal sites or other review areas, etc.) are associated with this action and are recorded on a different jurisdictional determination (JD) form(s).

Associated JD Names and Numbers: [N/A or List Associated AJDs or PJDs](#)

Review Area Location: State/Territory: [Hawaii](#) City: [Kailua-Kona](#)

County/Parish/Borough: [Island of Hawaii](#)

Center Coordinates of Review Area: Latitude: [19.64519°N](#), Longitude: [-156.00509°W](#)

Limits of review area: [See Attached Map; The limits include TMKs \(3\) 7-4-008:002 \(portion\), \(3\) 7-4-010:009 and 010, \(3\) 7-4-025:001, 002, 003, 005, 015, 021.](#)

### II. SUMMARY<sup>2</sup>

Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding tables in Section III., summarize data sources in Section IV., and attach completed Appendices A and/or B when specified.

- The review area is comprised entirely of dry land (i.e., there are no waters such as streams, rivers, wetlands, lakes, ponds, tidal waters, ditches, and the like in the entire review area). Rationale: [The review area, approximately 69.54 acres of mixed use development land, does not contain any possible waters. As a result of a desktop review, the Corps has determined there are no jurisdictional waters of the U.S. in the review area, as the entire review area is composed of dry land.](#)
- There are “navigable waters of the United States” within Rivers and Harbors Act jurisdiction within the review area (complete the table in Section III.A.).
- There are “waters of the United States” within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section III.B. and complete and attach appendices as appropriate).
- Potentially jurisdictional waters and/or features were assessed within the review area and determined to be non-jurisdictional (complete appropriate tables in Section III.C. and complete and attach appendices as appropriate).

<sup>1</sup> The final rule “Revised Definition of ‘Waters of the United States’” (2023 Rule) was published in the *Federal Register* on 18 January 2023 and the effective date is 20 March 2023. See <https://www.federalregister.gov/documents/2023/01/18/2022-28595/revised-definition-of-waters-of-the-united-states>.

<sup>2</sup> Map(s)/figure(s) or descriptions of the review area and any jurisdictional waters are attached to the AJD provided to the requestor.



**US ARMY CORPS OF ENGINEERS (USACE)  
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2023 RULE**

**III. FINDINGS IN THE REVIEW AREA**

**A. Jurisdictional under the Rivers and Harbors Act of 1899<sup>3</sup> (Section 10)<sup>4</sup>**

Section 10 Waters			
Section 10 water name	Section 10 size in review area		Type of Section 10 water
N/A	N/A	N/A	N/A.
Rationale for determination: N/A			

**B. Jurisdictional under the Clean Water Act**

Paragraph (a)(1) waters: <sup>5</sup> Waters which are: (i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide (Traditional Navigable Waters); (ii) The territorial seas; or (iii) Interstate waters, including interstate wetlands			
(a)(1) water name	(a)(1) size in review area		Type of paragraph (a)(1) water
N/A	N/A	N/A	N/A.
Rationale for determination: N/A			

Paragraph (a)(2) waters: Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5)			
(a)(2) water name	(a)(2) size in review area		Type of paragraph (a)(2) water
N/A	N/A	N/A	N/A.
Rationale for determination: N/A			

<sup>3</sup> If the navigable water of the United States is not subject to the ebb and flow of the tide and not included on the district's list of Rivers and Harbors Act (RHA) Section 10 navigable waters of the United States list do NOT use this form to make a report of findings to support a determination that the water is a navigable water of the United States. The district must follow the procedure outlined in 33 CFR part 329.14 to make a determination that water is a navigable water of the United States subject to Section 10 of the Rivers and Harbors Act.

<sup>4</sup> USACE has authority under both Section 9 and Section 10 of the Rivers and Harbors Act of 1899 but for convenience, in this AJD form, jurisdiction under RHA will be referred to as Section 10.

<sup>5</sup> A stand-alone TNW determination for a water that is not subject to Section 9 or 10 of RHA is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.





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**Paragraph (a)(3) waters:** Tributaries of waters identified in paragraph (a)(1) or (2): (i) That are relatively permanent, standing or continuously flowing bodies of water; or (ii) That either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1)

(a)(3) water name	(a)(3) size in review area	Type of paragraph (a)(3) water
N/A	N/A	N/A

Rationale for determination: N/A

**Paragraph (a)(4) waters:** Wetlands adjacent to the following waters: (i) Waters identified in paragraph (a)(1); or (ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3)(i) and with a continuous surface connection to those waters; or (iii) Waters identified in paragraph (a)(2) or (3) when the wetlands either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1)

(a)(4) water name	(a)(4) size in review area	Adjacency criteria
N/A	N/A	N/A

Type of paragraph (a)(4) water	N/A
--------------------------------	-----

Rationale for determination: N/A

**Paragraph (a)(5) waters:** Intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4): (i) That are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3)(i); or (ii) That either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1).<sup>6</sup>

(a)(5) water name	(a)(5) size in review area	Type of paragraph (a)(5) water
N/A	N/A	N/A

Rationale for determination: N/A

<sup>6</sup> In implementing the significant nexus standard, the agencies generally intend to analyze waters under paragraph (a)(5) individually to determine if they significantly affect the chemical, physical, or biological integrity of a paragraph (a)(1) water.



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**C. Waters or features that are not jurisdictional under the Clean Water Act**

<b>Waters analyzed under paragraph (a)(3)(ii), (a)(4)(iii), or (a)(5)(ii) and determined non-jurisdictional:</b> Tributaries of waters identified in paragraph (a)(1) or (2); and/or wetlands adjacent to waters identified in paragraph (a)(2) or (3); and/or intrastate lakes and ponds, streams, or wetlands not identified as (a)(1) through (4) waters; that either alone or in combination with similarly situated waters in the region, do not significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1).			
Water name	Water size in review area		Type of water for which significant nexus was not met:
N/A	N/A	N/A	N/A
Rationale for determination: N/A			

<b>(b)(1) – (b)(8) Excluded Features<sup>7</sup></b>			
Excluded feature name	Excluded feature size in review area		Exclusion <sup>8</sup>
N/A	N/A	N/A	N/A
Rationale for determination: N/A			

**IV. SUPPORTING INFORMATION**

**A. Paragraph (a)(1) water that is outside the review area:**

- Provide the name of the paragraph (a)(1) water: [N/A or Name of \(a\)\(1\) Water.](#)
- Type of paragraph (a)(1) water: [N/A.](#)
- Provide the rationale for jurisdiction of the paragraph (a)(1) water: [N/A or Provide Additional Discussion as Appropriate.](#)

**B. Significant nexus analyses**

- Appendix A is attached and includes the significant nexus analysis for any waters in the review area that were evaluated under paragraph (a)(3)(ii) and/or paragraph (a)(4)(iii).
- Appendix B is attached and includes the significant nexus analyses for any waters in the review area that were evaluated under paragraph (a)(5)(ii).
- There are no waters in the review area that require evaluation under the significant nexus standard. Therefore, neither Appendix A nor Appendix B are included with this form

<sup>7</sup> Transient features on the landscape that are difficult to document due to their non-permanent nature, such as rills and gullies, may not be specifically identified on the AJD form unless a requestor specifically asks a USACE district to do so. USACE districts may, in case-by-case instances, elect to document any such feature on a case-by-case basis, such as when the feature is relevant to analysis of the jurisdictional status of another water.

<sup>8</sup> Note the full text of the exclusions for (b)(1)-(6) and (b)(8) are included in the dropdown list, while the text for the (b)(7) exclusion is truncated due to space limitations. The full text of the (b)(7) exclusion is as follows: (b)(7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States



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**C. Data, models, and other relevant methods** Select/enter all resources that were used to support this determination and include data/maps and/or references/citations in the administrative record, as appropriate.

- Aquatic resources delineation submitted by, or on behalf of, the requestor: [Title\(s\) and Date\(s\)](#)  
The aquatic resources delineation submitted by or on behalf of the requestor is sufficient for purposes of this AJD [Select](#)  
Rationale: [N/A or Describe why Information is Partially or Wholly Insufficient for Purposes of this AJD](#)
- Aquatic resources delineation prepared by the USACE: [Title\(s\) and Date\(s\)](#)
- Wetland field data sheets prepared by the USACE: [Title\(s\) and Date\(s\)](#)
- OHWM data sheets prepared by the USACE: [Title\(s\) and Date\(s\)](#)
- USACE site visit: Date(s) of site visit(s): [Date\(s\) of Site Visit\(s\), Title\(s\) and Date\(s\) of Site Visit Summary Document\(s\)](#)
- Previous Jurisdictional Determinations (AJDs or PJDs) addressing the same (or portions of the same) review area: [POH-2016-00097 dated 26 April 2016; POH-2006-00285 dated 16 July 2008](#)
- Photographs: [Source\(s\), Title\(s\) and Date\(s\)](#)
- Aerial Imagery: [Google Earth accessed September 7, 2023](#)
- LiDAR: [Source\(s\), Title\(s\) and Date\(s\)](#)
- USDA NRCS Soil Survey: [Title\(s\) and Date\(s\)](#)
- USFWS NWI maps: [USFWS National Wetland Inventory Wetland Mapper accessed September 7, 2023](#)
- USGS topographic maps: [Title\(s\) and Date\(s\)](#)
- USGS NHD data/maps: [Title\(s\) and Date\(s\)](#)
- USGS Dynamic Surface Water Extent: [Title\(s\) and Date\(s\)](#)
- Section 10 navigability resource used: [Title\(s\) and Date\(s\)](#)

Other data sources or models used to aid in this determination:

Data source or model (Select)	Name, date, and other relevant information
<a href="#">USGS Sources</a>	N/A
<a href="#">USEPA Sources</a>	<a href="#">Watershed Assessment, Tracking &amp; Environmental Results System (WATERS) KMZ tool for Google Earth, v2.0 updated 09-20-2022</a>
<a href="#">USDA Sources<sup>9</sup></a>	N/A
<a href="#">NOAA Sources</a>	N/A
<a href="#">USACE Sources</a>	N/A
<a href="#">State/Local/Tribal Sources</a>	N/A
<a href="#">Other Sources</a>	N/A

**D. Additional comments to support AJD:** [A dry land AJD was issued for the same review area on April 27, 2016. Based on Google Earth images of the area between 2016 and 2023, there has been no changes to the review area. A review of the USFWS NWI Wetland Mapper and the USEPA WATERS tool also show there are no waters present in the review area.](#)

<sup>9</sup> Including Certified Wetland Determination from the NRCS.

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND  
REQUEST FOR APPEAL**

Applicant: <b>Bryan Esmeralda (Lili'uonamoku Trust)</b>		File Number: <b>POH-2016-00097</b>	Date: Sept. 8, 2023
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of Permission)		A
	PROFFERED PERMIT (Standard Permit or Letter of Permission)		B
	PERMIT DENIAL		C
<b>X</b>	APPROVED JURISDICTIONAL DETERMINATION		D
	PRELIMINARY JURISDICTIONAL DETERMINATION		E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at [http://www.usace.army.mil/CECW/Pages/reg\\_materials.aspx](http://www.usace.army.mil/CECW/Pages/reg_materials.aspx) or Corps regulations at 33 CFR Part 331.

- A. INITIAL PROFFERED PERMIT: You may accept or object to the permit.**
- ACCEPT:** If you received a Standard Permit or a Letter of Permission (LOP), you may sign the permit document and return it to the district commander for final authorization. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
  - OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district commander. Your objections must be received by the district commander within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district commander will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district commander will send you a proffered permit for your reconsideration, as indicated in Section B below.
- B. PROFFERED PERMIT: You may accept or appeal the permit**
- ACCEPT:** If you received a Standard Permit or a Letter of Permission (LOP), you may sign the permit document and return it to the district commander for final authorization. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
  - APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.
- C. PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.**
- D. APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.**
- ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
  - APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

E. PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Honolulu District, U.S. Army Corps of Engineers  
Regulatory Office, CEPOH-RO  
Building 230  
Fort Shafter, Hawaii 96858-5440  
808-835-4303

If you only have questions regarding the appeal process you may also contact:

Kate Bliss  
Regulatory Program Manager  
U.S. Army Corps of Engineers, Pacific Ocean Division  
Building 525  
Fort Shafter, HI 96858-5440  
808-835-4626  
Kate.m.bliss@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Commanders personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation, and will have the opportunity to participate in all site investigations.

\_\_\_\_\_  
Signature of appellant or agent.

Date:

Telephone number:

February 28, 2024

CJ Cayanan, Regulatory Specialist  
Department of the Army  
U.S. Army Corps of Engineers  
Honolulu District, Regulatory Office  
Building 230  
Fort Shafter, Hawai'i 96858-5440

**SUBJECT: Early Consultation for Proposed Makalapua Project District Project;  
Kailua-Kona, County of Hawai'i, Hawai'i (POH-2016-00097)**

Dear Ms. Cayanan:

Thank you for your letter dated September 08, 2023 providing early consultation comments on the Proposed Makalapua Project District. On behalf of Lili'uokalani Trust, we appreciate your confirmation that the site does not contain waters of the U.S. and a Department of Army (DA) permit under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899 is not required. We understand that while a DA permit is not required, Lili'uokalani Trust is responsible for all other applicable Federal, state, or local authorizations required by law.

Thank you again for your participation in the Chapter 343, Hawai'i Revised Statutes environmental review process. A copy of your letter and this response will be included in the Draft Environmental Assessment for this project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uokalani Trust

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JOSH GREEN, M.D.  
GOVERNOR  
KE KIA'ĀINA



KEITH A. REGAN  
COMPTROLLER  
KA LUNA HO'OMALU HANA LAULĀ

MEOH-LENG SILLIMAN  
DEPUTY COMPTROLLER  
KA HOPE LUNA HO'OMALU HANA LAULĀ

**STATE OF HAWAI'I | KA MOKU'ĀINA O HAWAI'I**  
**DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES | KA 'OIHANA LOIHELU A LAWELAWE LAULĀ**  
P.O. BOX 119, HONOLULU, HAWAII 96810-0119

(P)23.167

SEP 25 2023

Yukino Uchiyama  
Munekiyo Hiraga  
305 High Street, Suite 104  
Wailuku, Hawaii 96793

Dear Yukino Uchiyama:

Subject: Early Consultation for Proposed Makalapua Project District  
Keahuolu Ahupuaa, North Kona District, Hawaii Island  
TMKs: (3) 7-4-008:002 (por.), (3) 7-4-010:009, 010,  
(3) 7-4-025:001, 002, 003, 005, 015, 021

Thank you for the opportunity to provide comments on the subject project. The project does not impact any of the Department of Accounting and General Services' projects or existing facilities, and we have no comments to offer at this time.

If you have any questions, your staff may call Mr. David DePonte of the Planning Branch at (808) 586-0492, or email at david.c.deponte@hawaii.gov.

Sincerely,

CHRISTINE L. KINIMAKA  
Public Works Administrator

DD:mo  
c: Bryan Esmeralda, Liliuokalani Trust  
Miles Tagawa, DAGS Hawaii  
Roger Ross, DAGS Hawaii

February 28, 2024

Christine L. Kinimaka, Public Works Administrator  
State of Hawai'i  
Department of Accounting and General Services  
P.O. Box 119  
Honolulu, Hawai'i 96810-0119

**SUBJECT: Early Consultation for the Proposed Makalapua Project District Project; Kailua-Kona, County of Hawai'i, Hawai'i**

Dear Ms. Kinimaka:

Thank you for your letter dated September 25, 2023 providing early consultation comments on the Proposed Makalapua Project District Project. On behalf of Lili'uokalani Trust, we acknowledge that the Department of Accounting and General Services has no comments to offer at this time.

Thank you again for your participation in the Chapter 343, Hawai'i Revised Statutes environmental review process. A copy of your letter and this response will be included in the Draft Environmental Assessment for this project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

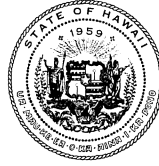
cc: Bryan Esmeralda, Lili'uokalani Trust

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JOSH GREEN, M.D.  
GOVERNOR

KEITH T. HAYASHI  
SUPERINTENDENT



**STATE OF HAWAII**  
**DEPARTMENT OF EDUCATION**  
**KA 'OIHANA HO'ONA'AUAO**  
P.O. BOX 2360  
HONOLULU, HAWAII 96804

OFFICE OF FACILITIES AND OPERATIONS

September 21, 2023

Ms. Yukino Uchiyama, AICP  
Munekiyo Hiraga  
305 High Street, Suite 104  
Wailuku, Hawaii 96793

Re: Early Consultation Request for Proposed Makalapua Project District  
Keahuolu Ahupuaa, North Kona District, Hawaii Island, TMK Nos.  
(3)7-4-008:002(por.), (3)7-4-010:009, 10, (3)7-4-025:001, 002, 003, 005, 015,  
and 021

Dear Ms. Uchiyama:

Thank you for your letter dated September 1, 2023. The Hawaii State Department of Education (Department) has reviewed the information provided and has the following comments on your Makalapua Project District (Project).

The Department has determined that the schools servicing the Project area are Kealakehe Elementary, Kealakehe Intermediate, and Kealakehe High School. The capacity for Kealakehe Elementary is 838 students. The enrollment for the 2022-2023 school year was 827. The capacity for Kealakehe Intermediate is 1,126 students. The enrollment for the 2022-2023 school year was 663.

Kealakehe Elementary and Kealakehe Intermediate are currently operating below capacity and are projected to continue to operate at this capacity over the next five years. The capacity for Kealakehe High School is 1,334 students. The enrollment for the 2022-2023 school year was 1,450 students. Currently, Kealakehe High School is functioning beyond its capacity. However, the projected enrollment for the next five years suggests that the school will be below its capacity.

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER

Ms. Yukino Uchiyama, AICP  
September 21, 2023  
Page 2

Should you have any questions, please contact Cori China, of the Facilities Development Branch, Planning Section, at (808) 784-5080 or via email at [cori.china@k12.hi.us](mailto:cori.china@k12.hi.us).

We appreciate the opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to be 'Roy Ikeda', with a long horizontal stroke extending to the right.

Roy Ikeda  
Interim Public Works Manager  
Planning Section

RI:ctc

c: Facilities Development Branch

February 28, 2024

Roy Ikeda, Interim Public Works Manager  
State of Hawai'i  
Department of Education  
P.O. Box 2360  
Honolulu, Hawai'i 96804

**SUBJECT: Early Consultation for Proposed Makalapua Project District Project;  
Kailua-Kona, County of Hawai'i, Hawai'i**

Dear Mr. Ikeda:

Thank you for your letter dated September 21, 2023 providing early consultation comments on the Proposed Makalapua Project District. On behalf of Lili'uokalani Trust, we appreciate the information provided in the letter and it will be discussed in the Draft Environmental Assessment. Lili'uokalani Trust will continue to consult with your Department as planning of the Makalapua Project District progresses.

Thank you again for your participation in the Chapter 343, Hawai'i Revised Statutes environmental review process. A copy of your letter and this response will be included in the Draft Environmental Assessment for this project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de  
cc: Bryan Esmeralda, Lili'uokalani Trust  
K:\DATA\LT\Makalapua PD 1875\ECL 2023\ECL Response Letters\DOE.docx

## Early Consultation Comment Received – DOH CWB

**From:** Maruoka, Colin <[Colin.Maruoka@doh.hawaii.gov](mailto:Colin.Maruoka@doh.hawaii.gov)>

**Sent:** Tuesday, September 26, 2023 3:15 PM

**To:** Yukino Uchiyama <[Yukino@munekiyohiraga.com](mailto:Yukino@munekiyohiraga.com)>

**Subject:** Early Consultation Request for Proposed Makalapua Project District

Dear Yukino Uchiyama,

The Department of Health, Clean Water Branch (CWB) revised a memorandum, July 28, 2023, notifying other agencies and project owners that CWB will no longer respond directly to requests for comments on the documents listed in the memo. The memorandum provided CWB's Standard Comments that agencies and project owners may use as CWB's official comments. The memorandum and standard comments can be located at <https://health.hawaii.gov/cwb/files/2023/07/Memorandum-for-CWB-Standard-Project-Comments-07016CMHK.23-part-1-signed.pdf>. If you require further information, feel free to contact me.

Sincerely,

**Colin T. Maruoka**

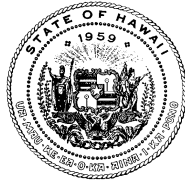
Clean Water Branch

State of Hawaii Department of Health

2827 Waimano Home Road, #225

Pearl City, Hawaii 96782

Phone: (808) 586-4309



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
KA 'OIHANA OLAKINO  
P. O. BOX 3378  
HONOLULU, HI 96801-3378

In reply, please refer to:  
File:

07016CMHK.23

July 28, 2023

**MEMORANDUM**

SUBJECT: Clean Water Branch Standard Project Comments

TO: Agencies and Project Owners

FROM: DARRYL LUM, P.E., CHIEF *Darryl Lum*  
Clean Water Branch

**This memo is provided for your information and sharing. You are encouraged to share this memo with your project partners, team members, and appropriate personnel.**

The Department of Health (DOH), Clean Water Branch (CWB) will no longer be responding directly to requests for comments on the following documents (Pre-consultation, Early Consultation, Preparation Notice, Draft, Final, Addendums, and/or Supplements):

- Environmental Impact Statements (EIS)
- Environmental Assessments (EA)
- Stream Channel Alteration Permits (SCAP)
- Stream Diversion Works Permits (SDWP)
- Well Construction/Pump Installation Permits
- Conservation District Use Applications (CDUA)
- Special Management Area Permits (SMAP)
- Shoreline Setback Areas (SSA)

For agencies or project owners requiring DOH-CWB comments for one or more of these documents, please utilize the DOH-CWB Standard Comments below regarding your project's responsibilities to maintain water quality and any necessary permitting. DOH-CWB Standard Comments are also available on the DOH-CWB website located at: <http://health.hawaii.gov/cwb/>.

### DOH-CWB Standard Comments

The following information is for agencies and/or project owners who are seeking comments regarding environmental compliance for their projects with the Hawaii Administrative Rules (HAR), Chapters 11-53, 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program.

1. Any project and its potential impacts to State waters must meet the following criteria:
  - a. Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.
  - b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.
  - c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).
2. You may be required to obtain National Pollutant Discharge Elimination System (NPDES) permit coverage for point source water pollutant discharges into State surface waters (HAR, Chapter 11-55). Point source means any discernible, confined, and discrete conveyance from which pollutants are or may be discharged.

For NPDES general permit coverage, a Notice of Intent (NOI) form must be submitted at least 30 calendar days before the commencement of the discharge. An application for a NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. To request NPDES permit coverage, you must submit the applicable form (“CWB Individual NPDES Form” or “CWB NOI Form”) through the e-Permitting Portal and the hard copy certification statement with the respective filing fee (\$1,000 for an individual NPDES permit or \$500 for a Notice of General Permit Coverage). Please open the e-Permitting Portal website located at: <https://eha-cloud.doh.hawaii.gov/epermit/>. You will be asked to do a one-time registration to obtain your login and password. After you register, click on the Application Finder tool and locate the appropriate form. Follow the instructions to complete and submit the form.

The DOH, Environmental Health Administration (EHA) e-Permitting Portal received Cross-Media Electronic Reporting Rule (CROMERR) certification by the Environmental Protection Agency (EPA) for electronic signature. Currently, Applicants and Permittees may now certify and submit EHA Electronic Signature Forms electronically through the EHA e-Permitting Portal without the need to physically send in an ink signature and CD/DVD/flash drive.

Beginning January 31, 2023, the DOH-CWB will only utilize electronic signature e-Permitting forms and discontinue the hard-copy signature forms. All hard-copy signature certification e-Permitting forms, including compliance forms, will be inactivated.

The electronic signature forms will require electronic signature approval to submit a form to the CWB. For details on how to obtain the electronic signature approval please visit CWB website located at:

<https://health.hawaii.gov/cwb/announcements/cwb-announces-new-requirement-for-electronic-signature-approval-for-all-submissions-beginning-january-31-2023/>.

The NPDES NOI or application will be processed after the filing fees submitted and payable to the "State of Hawaii" in the form of a pre-printed check, cashier's check, money order, or as otherwise specified by the director is received by the CWB.

Some of the activities requiring NPDES permit coverage include, but, are not limited to:

a. Discharges of Storm Water.

- i. For Construction Activities Disturbing One (1) or More Acres of Total Land Area.

By HAR Chapter 11-55, an NPDES permit is required before the start of the construction activities that result in the disturbance of one (1) or more acres of total land area, including clearing, grading, and excavation. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale.

- ii. For Industrial Activities for facilities with primary Standard Industrial Classification (SIC) Codes regulated in the Code of Federal Regulations (CFR) at 40 CFR 122.26(b)(14)(i) through (ix) and (xi). If a facility has more than one SIC code, the activity that generates the greatest revenue is the primary SIC code. If revenue information is unavailable, use the SIC code for the activity with the most employees. If employee information is also unavailable, use the SIC code for the activity with the greatest production.
- iii. From a small Municipal Separate Storm Sewer System (along with certain non-storm water discharges).

- b. Discharges to State surface waters from construction activity hydrotesting or dewatering.
- c. Discharges to State surface waters from cooling water applications.
- d. Discharges to State surface waters from the application of pesticides (including insecticides, herbicides, fungicides, rodenticides, and various other substances to control pest) to State waters.
- e. Well-Drilling Activities.

Any discharge to State surface waters of treated process wastewater effluent associated with well drilling activities is regulated by HAR Chapter 11-55. Discharges of treated process wastewater effluent (including well drilling slurries, lubricating fluids wastewater, and well purge wastewater) to State surface waters requires NPDES permit coverage.

NPDES permit coverage is not required for well pump testing. For well pump testing, the discharger shall take all measures necessary to prevent the discharge of pollutants from entering State waters. Such measures shall include, if necessary, containment of initial discharge until the discharge is essentially free of pollutants. If the discharge is entering a stream or river bed, best management practices (BMPs) shall be implemented to prevent the discharge from disturbing the clarity of the receiving water. If the discharge is entering a storm drain, the discharger must obtain written permission from the owner of the storm drain prior to discharge. Furthermore, BMPs shall be implemented to prevent the discharge from collecting sediments and other pollutants prior to entering the storm drain.

- 3. A Section 401 Water Quality Certification (WQC) may be required if your project/activity:
  - a. Requires a federal license or permit; and
  - b. May result in a discharge into waters of the United States (WOTUS).

"License or permit" means any permit, certificate, approval, registration, charter, membership, statutory exemption, or other form of permission granted by an agency of the federal government to conduct any activity which may result in any discharge.



The term “discharge” is defined in Clean Water Act, Subsections 502(16), 502(12), and 502(6).

Examples of “discharge” include, but are not limited to, allowing the following pollutants to enter WOTUS from the surface, or in-water: solid waste, rock/sand/dirt, heat, sewage, construction debris, any underwater work, chemicals, fugitive dust/spray paint, agricultural wastes, biological materials, industrial wastes, concrete/sealant/epoxy, and washing/cleaning effluent.

Determine if your project/activity requires a federal permit, license, certificate, approval, registration, or statutory exemption by contacting the appropriate federal agencies (e.g. Department of the Army (DA), U.S. Army Corps of Engineers (COE), Pacific Ocean Division Honolulu District Office (POH) Tel: (808) 835-4303; U.S. Environmental Protection Agency, Region 9 Tel: (415) 947-8021; Federal Energy Regulatory Commission Tel: (866) 208-3372; U.S. Coast Guard Office of Bridge Programs Tel: (202) 372-1511). If your project involves work in, over, or under waters of the United States, it is highly recommended that you contact the COE-POH regarding their DA permitting requirements.

To request an individual Section 401 WQC, you must complete and submit the Section 401 WQC application together with \$1,000 filing fee made payable to the "State of Hawaii" in the form of a check or other method specified by the department. This application is available on the e-Permitting Portal website located at: <https://eha-cloud.doh.hawaii.gov/epermit/>.

The processing of a Section 401 WQC application will begin after the CWB has received filing fee. The processing of a Section 401 WQC application is also subject to the compliance with 40 CFR §121 requirements.

Beginning January 31, 2023, the DOH-CWB will only utilize electronic signature e-Permitting forms and discontinue the hard-copy signature forms. All hard-copy signature certification e-Permitting forms, including compliance forms, will be inactivated.

The electronic signature forms will require electronic signature approval to submit a form to the CWB. For details on how to obtain the electronic signature approval please visit CWB website located at: <https://health.hawaii.gov/cwb/announcements/cwb-announces-new-requirement-for-electronic-signature-approval-for-all-submissions-beginning-january-31-2023/>.

Please see HAR, Chapters 11-53 and 11-54 for the State's Water Quality Standards and for more information on the Section 401 WQC. HAR, Chapters 11-53 and 11-54 are available on the CWB website at: <http://health.hawaii.gov/cwb/>.

4. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC are required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapters 11-53 and 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of \$25,000 per day per violation and up to two (2) years in jail.
5. It is the State's position that all projects must reduce, reuse, and recycle to protect, restore, and sustain water quality and beneficial uses of State waters. Project planning should:
  - a. Treat storm water as a resource to be protected by integrating it into project planning and permitting. Storm water has long been recognized as a source of irrigation that will not deplete potable water resources. What is often overlooked is that storm water recharges ground water supplies and feeds streams and estuaries; to ensure that these water cycles are not disrupted, storm water cannot be relegated as a waste product of impervious surfaces. Any project planning must recognize storm water as an asset that sustains and protects natural ecosystems and traditional beneficial uses of State waters, like community beautification, beach going, swimming, and fishing. The approaches necessary to do so, including low impact development methods or ecological bio-engineering of drainage ways must be identified in the planning stages to allow designers opportunity to include those approaches up front, prior to seeking zoning, construction, or building permits.
  - b. Clearly articulate the State's position on water quality and the beneficial uses of State waters. The plan should include statements regarding the implementation of methods to conserve natural resources (e.g. minimizing potable water for irrigation, gray water re-use options, energy conservation through smart design) and improve water quality.
  - c. Consider storm water Best Management Practice (BMP) approaches that minimize the use of potable water for irrigation through storm water storage and reuse, percolate storm water to recharge groundwater to revitalize natural hydrology, and treat storm water which is to be discharged.

- d. Consider the use of green building practices, such as pervious pavement and landscaping with native vegetation, to improve water quality by reducing excessive runoff and the need for excessive fertilization, respectively.
- e. Identify opportunities for retrofitting or bio-engineering existing storm water infrastructure to restore ecological function while maintaining, or even enhancing, hydraulic capacity. Consideration should be given to areas prone to flooding, or where the infrastructure is aged and will need to be rehabilitated.

February 28, 2024

Colin Maruoka  
State of Hawai'i  
Department of Health  
Clean Water Branch  
227 Waimano Home Road # 225  
Pearl City, Hawai'i 96782

SUBJECT: Early Consultation for Proposed Makalapua Project District Project;  
Kailua-Kona, County of Hawai'i, Hawai'i

Dear Mr. Maruoka:

Thank you for your letter dated September 26, 2023 providing early consultation comments on the Proposed Makalapua Project District. On behalf of Lili'uokalani Trust, we appreciate the standard comments provided in the memorandum and the comments have been forwarded to the project's civil engineer for review and incorporation into the project design, as may be appropriate.

Thank you again for your participation in the Chapter 343, Hawai'i Revised Statutes environmental review process. A copy of your letter and this response will be included in the Draft Environmental Assessment for this project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,

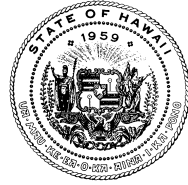


Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uokalani Trust  
Keith Uemura, Park Engineering

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STATE OF HAWAII  
DEPARTMENT OF HEALTH  
KA 'OIHANA OLAKINO  
P. O. BOX 3378  
HONOLULU, HI 96801-3378#

In reply, please refer to:  
File:

6636 – 3 7 4 008 002 etc Early Cons  
Prop Makalapua Proj District

September 15, 2023

Ms. Yukino Uchiyama, AICP, Manager  
Munekiyo & Hiraga  
305 High Street Suite 104  
Wailuku, Hawaii 96793  
Email: [planning@munekiyohiraga.com](mailto:planning@munekiyohiraga.com)

Dear Ms. Uchiyama:

Subject: Early Consultation Request for Proposed Makalapua Project District, Keahuolu  
Ahupuaa, North Kona District, Hawaii Island  
TMKs (3) 7-4-008: 002 (portion), 7-4-010: 009, 010,  
7-4-035: 001, 002, 003, 005, 015, & 021  
74-5562 Makala Blvd, Honokohau 1<sup>st</sup> & 2<sup>nd</sup>, Kailua-Kona, Hawaii 96740

Thank you for allowing us the opportunity to provide comments on for the subject project.

The Department of Health has no comments to offer as there are plans for the subject project to connect to the County of Hawaii's Kealakehe Wastewater Treatment Plant's sewer collection system.

Should you have any questions, please call Mr. Mark Tomomitsu of my staff at (808) 586-4294.

Sincerely,

A handwritten signature in black ink, appearing to read "Sina Pruder".

SINA PRUDER, P.E., CHIEF  
Wastewater Branch

LM/MST:ct

c: Mr. Dane Hiromasa, Kona IWS Staff, via email

February 28, 2024

Sina Pruder  
State of Hawai'i  
Department of Health  
Wastewater Branch  
P.O. Box 3378  
Honolulu, HI 96801-3378

**SUBJECT: Early Consultation for the Proposed Makalapua Project District Project; Kailua-Kona, County of Hawai'i, Hawai'i**

Dear Ms. Pruder:

Thank you for your letter dated September 15, 2023 providing early consultation comments on the Proposed Makalapua Project District Project. On behalf of Lili'uokalani Trust, we acknowledge that the Department of Health, Wastewater Branch, has no comments to offer at this time.

Thank you again for your participation in the Chapter 343, Hawai'i Revised Statutes environmental review process. A copy of your letter and this response will be included in the Draft Environmental Assessment for this project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

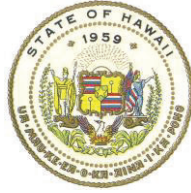
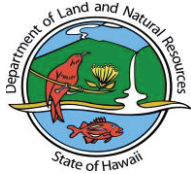
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cc: Bryan Esmeralda, Lili'uokalani Trust  
Keith Uemura, Park Engineering

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JOSH GREEN, M.D.  
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE  
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



DAWN N. S. CHANG  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA  
LAND DIVISION

P.O. BOX 621  
HONOLULU, HAWAII 96809

September 21, 2023

Munekiyo Hiraga  
Attn: Ms. Yukino Uchiyama, AICP  
305 High Street, Suite 104  
Wailuku, Hawaii 96793

via email: [planning@munekiyohiraga.com](mailto:planning@munekiyohiraga.com)

Dear Ms. Uchiyama:

**SUBJECT:** Early Consultation Request for the Proposed **Makalapua Project District** located at Keahuolu Ahupua'a, North Kona District, Island of Hawaii; TMK Nos.: (3) 7-4-008:002 por.; (3) 7-4-010:009 and 010; and (3) 7-4-025: 001, 002, 003, 005, 015, and 021 on behalf of Lili'uokalani Trust

Thank you for the opportunity to review and comment on the subject matter. The Land Division of the Department of Land and Natural Resources (DLNR) distributed or made available a copy of your request pertaining to the subject matter to DLNR's Divisions for their review and comments.

At this time, enclosed are comments from the (a) Engineering Division and (b) Land Division–Hawaii District on the subject matter. Should you have any questions, please feel free to contact Darlene Nakamura at (808) 587-0417 or email: [darlene.k.nakamura@hawaii.gov](mailto:darlene.k.nakamura@hawaii.gov). Thank you.

Sincerely,

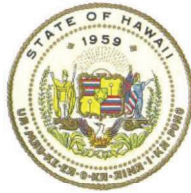
*Russell Tsuji*

Russell Y. Tsuji  
Land Administrator

Enclosures  
cc: Central Files

JOSH GREEN, M.D.  
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE  
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



DAWN N. S. CHANG  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA  
LAND DIVISION

P.O. BOX 621  
HONOLULU, HAWAII 96809

September 5, 2023

**MEMORANDUM**

FROM: TØ:

**DLNR Agencies:**

- Div. of Aquatic Resources
- Div. of Boating & Ocean Recreation
- Engineering Division** ([DLNR.ENGR@hawaii.gov](mailto:DLNR.ENGR@hawaii.gov))
- Div. of Forestry & Wildlife ([rbyrosa.t.terrago@hawaii.gov](mailto:rbyrosa.t.terrago@hawaii.gov))
- Div. of State Parks
- Commission on Water Resource Management ([DLNR.CWRM@hawaii.gov](mailto:DLNR.CWRM@hawaii.gov))
- Office of Conservation & Coastal Lands
- Land Division – Hawaii District ([gordon.c.heit@hawaii.gov](mailto:gordon.c.heit@hawaii.gov))
- Aha Moku Advisory Committee ([leimana.k.damate@hawaii.gov](mailto:leimana.k.damate@hawaii.gov))

TO: FROM:

Russell Y. Tsuji, Land Administrator *Russell Tsuji*

SUBJECT:

Early Consultation Request for the Proposed **Makalapua Project District**

LOCATION:

Keahuolu Ahupua'a, North Kona District, Island of Hawaii;  
TMK Nos.: (3) 7-4-008:002 por.; (3) 7-4-010:009 and 010; and (3) 7-4-025:  
001, 002, 003, 005, 015, and 021

APPLICANT:

Munekiyo Hiraga on behalf of Lili'uokalani Trust

Transmitted for your review and comment is information on the above-referenced subject matter. Please submit comments by **September 21, 2023**.

If no response is received by the above date, we will assume your agency has no comments. Should you have any questions about this request, please contact Darlene Nakamura at [darlene.k.nakamura@hawaii.gov](mailto:darlene.k.nakamura@hawaii.gov). Thank you.

**BRIEF COMMENTS:**

- We have no objections.
- We have no comments.
- We have no additional comments.
- Comments are included/attached.

Signed:

Print Name:

Carty S. Chang, Chief Engineer

Division:

Engineering Division

Date:

Sep 8, 2023

Attachments

cc: Central Files



**DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION**

**LD/Russell Y. Tsuji**

**Ref: Early Consultation Request for the Proposed Makalapua Project District  
Location: Keahuolu Ahupua‘a, North Kona District, Island of Hawaii;  
TMK(s): (3) 7-4-008:002 por.; (3) 7-4-010:009 and 010; and (3) 7-4-025: 001,  
002, 003, 005, 015, and 021  
Applicant: Munekiyo Hiraga on behalf of Lili‘uokalani Trust**

**COMMENTS**

The rules and regulations of the National Flood Insurance Program (NFIP), Title 44 of the Code of Federal Regulations (44CFR), are in effect when development falls within a Special Flood Hazard Area (high-risk areas). Be advised that 44CFR, Chapter 1, Subchapter B, Part 60 reflects the minimum standards as set forth by the NFIP. Local community flood ordinances may stipulate higher standards that can be more restrictive and would take precedence over the minimum NFIP standards.

The owner of the project property and/or their representative is responsible to research the Flood Hazard Zone designation for the project. Flood zones subject to NFIP requirements are identified on FEMA’s Flood Insurance Rate Maps (FIRM). The official FIRMs can be accessed through FEMA’s Map Service Center ([msc.fema.gov](http://msc.fema.gov)). Our Flood Hazard Assessment Tool (FHAT) ([fhat.hawaii.gov](http://fhat.hawaii.gov)) could also be used to research flood hazard information.

If there are questions regarding the local flood ordinances, please contact the applicable County NFIP coordinating agency below:

- Oahu: City and County of Honolulu, Department of Planning and Permitting (808) 768-8098.
- Hawaii Island: County of Hawaii, Department of Public Works (808) 961-8327.
- Maui/Molokai/Lanai County of Maui, Department of Planning (808) 270-7139.
- Kauai: County of Kauai, Department of Public Works (808) 241-4849.

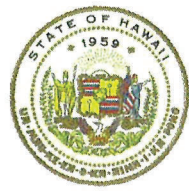
Signed:   
CARTY S. CHANG, CHIEF ENGINEER

Date: Sep 8, 2023

7/14/23

JOSH GREEN, M.D.  
GOVERNOR | KE KIA'AINA

SYLVIA LUKE  
LIEUTENANT GOVERNOR | KA HOPE KIA'AINA



DAWN N. S. CHANG  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT

STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA  
LAND DIVISION

P.O. BOX 621  
HONOLULU, HAWAII 96809

September 5, 2023

**MEMORANDUM**

TO: **DLNR Agencies:**  
 \_\_\_ Div. of Aquatic Resources  
 \_\_\_ Div. of Boating & Ocean Recreation  
 X Engineering Division ([DLNR.ENGR@hawaii.gov](mailto:DLNR.ENGR@hawaii.gov))  
 X Div. of Forestry & Wildlife ([rubyrosa.t.terrago@hawaii.gov](mailto:rubyrosa.t.terrago@hawaii.gov))  
 \_\_\_ Div. of State Parks  
 X Commission on Water Resource Management ([DLNR.CWRM@hawaii.gov](mailto:DLNR.CWRM@hawaii.gov))  
 \_\_\_ Office of Conservation & Coastal Lands  
 X Land Division – Hawaii District ([gordon.c.heit@hawaii.gov](mailto:gordon.c.heit@hawaii.gov))  
 X Aha Moku Advisory Committee ([leimana.k.damate@hawaii.gov](mailto:leimana.k.damate@hawaii.gov))

FROM: Russell Y. Tsuji, Land Administrator *Russell Tsuji*  
 SUBJECT: Early Consultation Request for the Proposed **Makalapua Project District**  
 LOCATION: Keahuolu Ahupua'a, North Kona District, Island of Hawaii;  
 TMK Nos.: (3) 7-4-008:002 por.; (3) 7-4-010:009 and 010; and (3) 7-4-025:  
 001, 002, 003, 005, 015, and 021  
 APPLICANT: Munekiyo Hiraga on behalf of Lili'uokalani Trust

Transmitted for your review and comment is information on the above-referenced subject matter. Please submit comments by **September 21, 2023**.

If no response is received by the above date, we will assume your agency has no comments. Should you have any questions about this request, please contact Darlene Nakamura at [darlene.k.nakamura@hawaii.gov](mailto:darlene.k.nakamura@hawaii.gov). Thank you.

- BRIEF COMMENTS:**
- ( ) We have no objections.
  - (✓) We have no comments.
  - ( ) We have no additional comments.
  - ( ) Comments are included/attached.

Signed: \_\_\_\_\_  
 Print Name: GORDON C. HEIT  
 Division: Land Division  
 Date: 9/15/23

Attachments  
cc: Central Files

February 28, 2024

Russell Tsuji, Land Administrator  
Department of Land and Natural Resources  
P.O. Box 621  
Honolulu, Hawai'i 96809

**SUBJECT:** Early Consultation for Proposed Makalapua Project District Project;  
Kailua-Kona, County of Hawai'i, Hawai'i

Dear Mr. Tsuji:

Thank you for your letter dated September 21, 2023, providing early consultation comments on the Proposed Makalapua Project District. On behalf of Lili'uokalani Trust, we offer the following information in response to the comments received.

### **Engineering Division**

#### **Comment No. 1**

*The rules and regulations of the National Flood Insurance Program (NFIP), Title 44 of the Code of Federal Regulations (44CFR), are in effect when development falls within a Special Flood Hazard Area (high-risk areas). Be advised that 44CFR, Chapter 1, Subchapter B, Part 60 reflects the minimum standards as set forth by the NFIP. Local community flood ordinances may stipulate higher standards that can be more restrictive and would take precedence over the minimum NFIP standards. The owner of the project property and/or their representative is responsible to research the Flood Hazard Zone designation for the project. Flood zones subject to NFIP requirements are identified on FEMA's Flood Insurance Rate Maps (FIRM). The official FIRMs can be accessed through FEMA's Map Service Center ([msc.fema.gov](https://msc.fema.gov)). Our Flood Hazard Assessment Tool (FHAT) ([that.hawaii.gov](https://that.hawaii.gov)) could also be used to research flood hazard information.*

**Response:** Thank you for the information regarding compliance for flood Hazard Zones within the project. It is noted that the Makalapua Project District is located within Zone X, an area of minimum flood hazard, in its entirety, and as such, compliance with the flood hazard development standards is not anticipated to be required.

**Land Division – Hawaii District**

**Comment No. 1**

*No Comment*

**Response:** On behalf of Lili'uokalani Trust, we acknowledge that the Department of Land and Natural Resources, Land Division, has no comments to offer at this time.

Thank you again for your participation in the Chapter 343, Hawai'i Revised Statutes environmental review process. A copy of your letter and this response will be included in the Draft Environmental Assessment for this project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

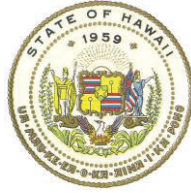
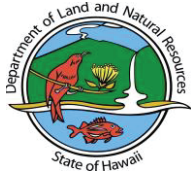
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cc: Bryan Esmeralda, Lili'uokalani Trust

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JOSH GREEN, M.D.  
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE  
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



DAWN N. S. CHANG  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA  
LAND DIVISION

P.O. BOX 621  
HONOLULU, HAWAII 96809

October 3, 2023

Munekiyo Hiraga  
Attn: Ms. Yukino Uchiyama, AICP  
305 High Street, Suite 104  
Wailuku, Hawaii 96793

via email: [planning@munekiyohiraga.com](mailto:planning@munekiyohiraga.com)

Dear Ms. Uchiyama:

SUBJECT: Early Consultation Request for the Proposed **Makalapua Project District** located at Keahuolu Ahupua'a, North Kona District, Island of Hawaii; TMK Nos.: (3) 7-4-008:002 por.; (3) 7-4-010:009 and 010; and (3) 7-4-025: 001, 002, 003, 005, 015, and 021 on behalf of Lili'uokalani Trust

Thank you for the opportunity to review and comment on the subject matter. In addition to our previous comments dated September 21, 2023, enclosed are comments from the Division of Forestry & Wildlife on the subject matter. Should you have any questions, please feel free to contact Darlene Nakamura at (808) 587-0417 or email: [darlene.k.nakamura@hawaii.gov](mailto:darlene.k.nakamura@hawaii.gov). Thank you.

Sincerely,

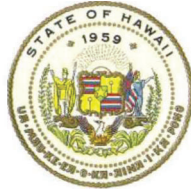
*Russell Tsuji*

Russell Y. Tsuji  
Land Administrator

Enclosures  
cc: Central Files

JOSH GREEN, M.D.  
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE  
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



DAWN N. S. CHANG  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA  
LAND DIVISION

P.O. BOX 621  
HONOLULU, HAWAII 96809

September 5, 2023

MEMORANDUM

FROM:

**DLNR Agencies:**

Div. of Aquatic Resources

Div. of Boating & Ocean Recreation

Engineering Division ([DLNR.ENGR@hawaii.gov](mailto:DLNR.ENGR@hawaii.gov))

Div. of Forestry & Wildlife ([rbyrosa.t.terrago@hawaii.gov](mailto:rbyrosa.t.terrago@hawaii.gov))

Div. of State Parks

Commission on Water Resource Management ([DLNR.CWRM@hawaii.gov](mailto:DLNR.CWRM@hawaii.gov))

Office of Conservation & Coastal Lands

Land Division – Hawaii District ([gordon.c.heit@hawaii.gov](mailto:gordon.c.heit@hawaii.gov))

Aha Moku Advisory Committee ([leimana.k.damate@hawaii.gov](mailto:leimana.k.damate@hawaii.gov))

TO:

Russell Y. Tsuji, Land Administrator *Russell Tsuji*

SUBJECT:

Early Consultation Request for the Proposed **Makalapua Project District**

LOCATION:

Keahuolu Ahupua'a, North Kona District, Island of Hawaii;

TMK Nos.: (3) 7-4-008:002 por.; (3) 7-4-010:009 and 010; and (3) 7-4-025:001, 002, 003, 005, 015, and 021

APPLICANT:

Munekiyo Hiraga on behalf of Lili'uokalani Trust

Transmitted for your review and comment is information on the above-referenced subject matter. Please submit comments by **September 21, 2023**.

If no response is received by the above date, we will assume your agency has no comments. Should you have any questions about this request, please contact Darlene Nakamura at [darlene.k.nakamura@hawaii.gov](mailto:darlene.k.nakamura@hawaii.gov). Thank you.

**BRIEF COMMENTS:**

We have no objections.

We have no comments.

We have no additional comments.

Comments are included/attached.

Signed:

*JDO*

Print Name:

Jason D. Omick, Acting Wildlife Prog. Mgr.

Division:

Division of Forestry and Wildlife

Date:

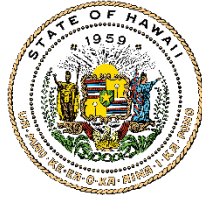
Sep 29, 2023

Attachments

cc: Central Files

JOSH GREEN, M.D.  
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE  
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



DAWN N.S. CHANG  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT

LAURA H.E. KAAKUA  
FIRST DEPUTY

M. KALEO MANUEL  
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES  
ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAI'I  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA

DIVISION OF FORESTRY AND WILDLIFE  
1151 PUNCHBOWL STREET, ROOM 325  
HONOLULU, HAWAII 96813

September 27, 2023

Log no. 4251

**MEMORANDUM**

**TO:** RUSSELL Y. TSUJI, Administrator  
Land Division

**FROM:** JASON D. OMICK, Acting Wildlife Program Manager  
Division of Forestry and Wildlife

**SUBJECT: Early Consultation Request for the Proposed Makalapua Project, District Kahuolu Ahupua'a, North Kona District, on Hawai 'i Island**

The Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW) has received your request for comments on the proposed Makalapua Project located north of Kailua Kona on land owned by Lili'uokalani Trust, on the island of Hawai 'i; TMK Nos. (3)7-4-008:002(por.), (3)7-4-010:009, 010, (3)7-4-025:001, 002, 003, 005, 015, and 021. The project site is bordered by the Kona Commons Shopping Center to the northeast, vacant lands to the north, the existing Kona Industrial Subdivision (KIS) to the east, and the County's Kailua Park (also known as Old Airport Park) to the south and west. The project site is located within the County of Hawai 'i's Special Management Area (SMA). A SMA Use Permit (SMA 201) was issued in 1983 for an approximately 100-acre area between Queen Ka'ahumanu Highway and Kuakini Highway for the development of an industrial subdivision. SMA 201 was amended in 2005 to allow for industrial commercial mixed uses permitted by MCX zoning. The project aims at creating a mixed-use community that enhances the local landscape while offering a blend of residential, commercial, and recreational uses. The Project District will include 600 residential units with a mix of single-family and multi-family product types; approximately 220,900 square feet of commercial use, and two hotels providing approximately 150 hotel rooms. The project will meet the Kona Village Design Guidelines' open space requirement whereby at least five (5) percent of the project will be open space. The Makalapua Project District's Street network may include the realignment of Makala Boulevard below the Kona Commons Shopping Center to align with the Kailua Park's (Old Airport Park) main access, contingent upon discussions with County agencies. Two (2) north-south extensions (Pawai Place and Ma'a Way) are also planned to be developed and improved within the Project District's interconnected street network. Potential offsite improvements include the widening and restriping of portions of Kuakini Highway and Queen Ka'ahumanu Highway and will be considered in conjunction with

the Makalapua Project District. These improvements will be included and discussed in the Environmental Assessment (EA) for the project.

DOFAW recommends the following measures be included in the new Draft Environmental Assessment with the intent to avoid construction and operational impacts to State-listed species.

The State listed 'ōpe'ape'a or Hawaiian Hoary Bat (*Lasiurus cinereus semotus*) could potentially occur at or in the vicinity of the project and may roost in nearby trees. Any required site clearing should be timed to avoid disturbance to bats during their birthing and pup rearing season (June 1 through September 15). During this period woody plants greater than 15 feet (4.6 meters) tall should not be disturbed, removed, or trimmed. Barbed wire should also be avoided for any construction because bats can become ensnared and killed by such fencing material during flight.

Artificial lighting can adversely impact seabirds that may pass through the area at night by causing them to become disoriented. This disorientation can result in their collision with manmade structures or the grounding of birds. For nighttime work that might be required, DOFAW recommends that all lights used be fully shielded to minimize the attraction of seabirds. Nighttime work that requires outdoor lighting should be avoided during the seabird fledging season, from September 15 through December 15, when young seabirds make their maiden voyage to sea.

If nighttime construction is required during the seabird fledging season (September 15 to December 15), we recommend that a qualified biologist be present at the project site to monitor and assess the risk of seabirds being attracted or grounded due to the lighting. If seabirds are seen circling around the area, lights should then be turned off. If a downed seabird is detected, please follow DOFAW's recommended response protocol by visiting <https://dlnr.hawaii.gov/wildlife/seabird-fallout-season/#response>.

Permanent lighting also poses a risk of seabird attraction, and as such should be minimized or eliminated to protect seabird flyways and preserve the night sky. For illustrations and guidance related to seabird-friendly light styles that also protect seabirds and the dark starry skies of Hawai'i please visit <https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf>.

State-listed waterbirds such as ae'ō or Hawaiian stilt (*Himantopus mexicanus knudseni*), 'alae ke'oke'ō or Hawaiian coot (*Fulica alai*), and nēnē or Hawaiian Goose (*Branta sandvicensis*) could potentially occur at or in the vicinity of the proposed project site. It is against State law to harm or harass these species. If any of these species are present during construction, all activities within 100 feet (30 meters) should cease and the bird or birds should not be approached. Work may continue after the bird or birds leave the area of their own accord. If a nest is discovered at any point, please contact the O'ahu Branch DOFAW Office at (808) 973-9778 and establish a buffer zone around the nest.

The endemic pueo or Hawaiian Short-Eared Owl (*Asio flammeus sandwichensis*) could potentially nest in the project area. Before any potential vegetative alteration, especially ground-based disturbance, we recommend that line transect surveys are conducted during crepuscular hours through the project area. If a pueo nest is discovered, a minimum buffer distance of 100 meters from the nest should be established until chicks are capable of flight.



The State listed 'io or Hawaiian Hawk (*Buteo solitarius*) may occur in the project vicinity. Prior to undertaking vegetation clearing, DOFAW recommends that pre-construction surveys of the area be conducted by a qualified biologist following appropriate survey methods (Gorresen et al., 2008) to ensure no Hawaiian Hawk nests are present, which may occur during the breeding season from March to September. The survey should be conducted at least 10 days prior to the start of construction. If an 'ilo nest is detected, a buffer zone of 100 meters (330 feet) should be established around it where no construction shall occur until the chick or chicks have fledged, or the nest is abandoned and. DOFAW staff should be immediately notified. If adult individuals are detected in the area during construction, all activities within 30 meters (100 feet) of the bird should cease. Work may continue when the bird has left the area on its own.

The project area is within the range of the State listed Blackburn's Sphinx Moth (*Manduca blackburni*) or BSM. Larvae of BSM feed on many nonnative hostplants, which includes tree tobacco (*Nicotiana glauca*), that grow in disturbed soil. We recommend contacting the Hawai'i Island Branch DOFAW office at (808) 974-4221 for further information about where BSM may be present and whether a vegetation survey should be conducted to determine the presence of plants preferred by BSM. DOFAW recommends removing plants less than one meter in height or during the dry season to avoid harm to BSM. If you intend to either remove tree tobacco over one meter in height or to disturb the ground around or within several meters of these plants, they must be thoroughly inspected by a qualified entomologist for the presence of BSM eggs and larvae.

DOFAW recommends using native plant species for landscaping that are appropriate for the area, i.e., plants for which climate conditions are suitable for them to thrive, plants that historically occurred there, etc. Please do not plant invasive species. DOFAW also recommends referring to [www.plantpono.org](http://www.plantpono.org) for guidance on the selection and evaluation of landscaping plants and to determine the potential invasiveness of plants proposed for use in the project.

DOFAW recommends minimizing the movement of plant or soil material between worksites. Soil and plant material may contain detrimental fungal pathogens (e.g., Rapid 'Ōhi'a Death), vertebrate and invertebrate pests (e.g., Little Fire Ants, Coqui Frogs, etc.), or invasive plant parts (e.g., African Tulip, Octopus Tree, Trumpet Tree, etc.) that could harm our native species and ecosystems. We recommend consulting the Big Island Invasive Species Committee (BIISC) at (808) 933-3340 to help plan, design, and construct the project, learn of any high-risk invasive species in the area, and ways to mitigate their spread. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species.

Due to the arid climate and risks of wildfire to listed species, we recommend coordinating with the Hawai'i Wildfire Management Organization at (808) 850-0900 or [admin@hawaiiwildfire.org](mailto:admin@hawaiiwildfire.org), on how wildfire prevention can be addressed in the project area. When engaging in activities that have a high risk of starting a wildfire (i.e., welding in grass), it is recommended that you: Wet down the area before starting your task, continuously wet down the area as needed, have a fire extinguisher on hand. In the event that your vision is impaired, (i.e., welding goggles) have a spotter to watch for fire starts.

Cats prey on native birds, including State-listed endangered waterbirds, seabirds, and forest birds. Predation is instinctive and means that even well-fed cats will hunt and kill wildlife.

Therefore, DOFAW recommends that homeowner associations request that residents with pet cats be kept indoors or safely contained. In addition, no feeding of feral cats should occur on the premises.

We appreciate your efforts to work with our office for the conservation of our native species. These comments are general guidelines and should not be considered comprehensive for this site or project. It is the responsibility of the applicant to do their own due diligence to avoid any negative environmental impacts. Should the scope of the project change significantly, or should it become apparent that threatened or endangered species may be impacted, please contact our staff as soon as possible. If you have any questions, please contact Myrna N. Giraldo Pérez, Protected Species Habitat Conservation Planning Coordinator at (808) 265-3276 or [myrna.giraldo-perez@hawaii.gov](mailto:myrna.giraldo-perez@hawaii.gov).

Sincerely,



JASON D. OMICK  
Acting Wildlife Program Manager

February 28, 2024

Jason D. Omick, Acting Wildlife Program Manager  
State of Hawai'i  
Department of Land and Natural Resources  
Division of Forestry and Wildlife  
1151 Punchbowl Street Room 325  
Honolulu, Hawai'i 96813

**SUBJECT:** Early Consultation for Proposed Makalapua Project District Project;  
Kailua-Kona, County of Hawai'i, Hawai'i

Dear Mr. Omick:

Thank you for your letter dated September 27, 2023 providing early consultation comments on the Proposed Makalapua Project District. On behalf of Lili'uokalani Trust, we offer the following information in response to the comments received.

**Comment No. 1**

*The State listed 'ōpe'ape'a or Hawaiian Hoary Bat (*Lasiurus cinereus semotus*) could potentially occur at or in the vicinity of the project and may roost in nearby trees. Any required site clearing should be timed to avoid disturbance to bats during their birthing and pup rearing season (June 1 through September 15). During this period woody plants greater than 15 feet (4.6 meters) tall should not be disturbed, removed, or trimmed. Barbed wire should also be avoided for any construction because bats can become ensnared and killed by such fencing material during flight.*

**Response:** Thank you for the information regarding the Hawaiian Hoary Bat. A Flora and Fauna survey was conducted for the project site and did not identify any Hawaiian Hoary Bat at or in the vicinity of the project site. Nevertheless, recommended mitigation measures will be implemented, as appropriate, to protect any Hawaiian hoary bat that may occur in the vicinity or roost in the nearby trees. The Flora and Fauna survey will be included and discussed in the Draft Environmental Assessment (EA).

### **Comment No. 2**

*Artificial lighting can adversely impact seabirds that may pass through the area at night by causing them to become disoriented. This disorientation can result in their collision with manmade structures or the grounding of birds. For nighttime work that might be required, DOFAW recommends that all lights used be fully shielded to minimize the attraction of seabirds. Nighttime work that requires outdoor lighting should be avoided during the seabird fledging season, from September 15 through December 15, when young seabirds make their maiden voyage to sea.*

**Response:** The Flora and Fauna survey conducted for the project site did not identify any seabirds within or in the vicinity of the project site. Nonetheless, all lighting will be fully shielded to minimize the attraction of seabirds. Night time construction is not expected to be required, however, should it be required, outdoor lighting will be avoided during seabirds fledging season from September 15 through December 15.

### **Comment No 3**

*State-listed waterbirds such as ae'ō or Hawaiian stilt (*Himantopus mexicanus knudseni*), 'alae ke'oke'ō or Hawaiian coot (*Fulica alai*), and nēnē or Hawaiian Goose (*Branta sandvicensis*) could potentially occur at or in the vicinity of the proposed project site. It is against State law to harm or harass these species. If any of these species are present during construction, all activities within 100 feet (30 meters) should cease and the bird or birds should not be approached. Work may continue after the bird or birds leave the area of their own accord. If a nest is discovered at any point, please contact the O'ahu Branch DOFAW Office at (808) 973- 9778 and establish a buffer zone around the nest.*

**Response:** Thank you for the information regarding State-listed waterbirds. The Flora and Fauna survey for the project site did not identify any State-listed waterbirds within or in the vicinity of the project site. Should any State-listed waterbirds be found within the project site during construction, these species will not be harassed or harmed and recommended protective protocols will be followed.

### **Comment No. 4**

*The endemic pueo or Hawaiian Short-Eared Owl (*Asio flammeus sandwichensis*) could potentially nest in the project area. Before any potential vegetative alteration, especially ground-based disturbance, we recommend that line transect surveys are conducted during crepuscular hours through the project area. If a pueo nest is discovered, a minimum*

*buffer distance of 100 meters from the nest should be established until chicks are capable of flight.*

**Response:** The Flora and Fauna survey for the project site did not identify any pueo within or in the vicinity of the project site. We note your recommendation that, a line transect survey should be conducted during crepuscular hours before any vegetative alteration, and if a pueo nest is discovered a minimum buffer distance of 100 meters from the nest will be established until chicks are capable of flight.

#### **Comment No. 5**

*The State listed 'io or Hawaiian Hawk (*Buteo solitarius*) may occur in the project vicinity. Prior to undertaking vegetation clearing, DOFAW recommends that pre-construction surveys of the area be conducted by a qualified biologist following appropriate survey methods (Gorressen et al., 2008) to ensure no Hawaiian Hawk nests are present, which may occur during the breeding season from March to September. The survey should be conducted at least 10 days prior to the start of construction. If an 'ilo nest is detected, a buffer zone of 100 meters (330 feet) should be established around it where no construction shall occur until the chick or chicks have fledged, or the nest is abandoned and. DOFAW staff should be immediately notified. If adult individuals are detected in the area during construction, all activities within 30 meters (100 feet) of the bird should cease. Work may continue when the bird has left the area on its own.*

**Response:** The Hawaiian Hawk was not observed during the field survey for the Flora and Fauna Survey report. The recommendations have been forwarded to the project's biological resources consultant and the project team, and will be implemented, as much as practical.

#### **Comment No. 6**

*The project area is within the range of the State listed Blackburn's Sphinx Moth (*Manduca blackburni*) or BSM. Larvae of BSM feed on many nonnative hostplants, which includes tree tobacco (*Nicotiana glauca*), that grow in disturbed soil. We recommend contacting the Hawai'i Island Branch DOFAW office at (808) 974-4221 for further information about where BSM may be present and whether a vegetation survey should be conducted to determine the presence of plants preferred by BSM. DOFAW recommends removing plants less than one meter in height or during the dry season to avoid harm to BSM. If you intend to either remove tree tobacco over one meter in height or to disturb the ground around or within several meters of these plants, they must be thoroughly inspected by a qualified entomologist for the presence of BSM eggs and larvae.*

**Response:** We appreciate the information that the project area is within the range of the State listed Blackburn's Sphinx Moth (BSM). It is noted that the project's Flora and Fauna survey did not identify BSM nor its nonnative host plants, including tree tobacco. Nevertheless, the project will follow the recommended mitigation measures to protect BSM that may potentially occur within or in the vicinity of the project area.

**Comment No. 7**

*DOFAW recommends using native plant species for landscaping that are appropriate for the area, i.e., plants for which climate conditions are suitable for them to thrive, plants that historically occurred there, etc. Please do not plant invasive species. DOFAW also recommends referring to [www.plantpono.org](http://www.plantpono.org) for guidance on the selection and evaluation of landscaping plants and to determine the potential invasiveness of plants proposed for use in the project.*

**Response:** Invasive species will not be used in landscaping and native plant species will be incorporated into the landscaping plans for the Makalapua Project District as much as practical. We appreciate the link and it has been shared with the project team for review and incorporation into the landscaping plans.

**Comment No. 8**

*DOFAW recommends minimizing the movement of plant or soil material between worksites. Soil and plant material may contain detrimental fungal pathogens (e.g., Rapid 'Ōhi'a Death), vertebrate and invertebrate pests (e.g., Little Fire Ants, Coqui Frogs, etc.), or invasive plant parts (e.g., African Tulip, Octopus Tree, Trumpet Tree, etc.) that could harm our native species and ecosystems. We recommend consulting the Big Island Invasive Species Committee (BIISC) at (808) 933-3340 to help plan, design, and construct the project, learn of any high-risk invasive species in the area, and ways to mitigate their spread. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species.*

**Response:** As recommended, the project will minimize the movement of plants and soil materials between worksites, and as may be appropriate, the Big Island Invasive Species Committee will be consulted. All equipment, materials, and personnel will be cleaned of excess soil and debris to minimize the risk of spreading invasive species.

**Comment No. 9**

*Due to the arid climate and risks of wildfire to listed species, we recommend coordinating with the Hawai'i Wildfire Management Organization at (808) 850-0900 or admin@hawaiiwildfire.org, on how wildfire prevention can be addressed in the project area. When engaging in activities that have a high risk of starting a wildfire (i.e., welding in grass), it is recommended that you: Wet down the area before starting your task, continuously wet down the area as needed, have a fire extinguisher on hand. In the event that your vision is impaired, (i.e., welding goggles) have a spotter to watch for fire starts.*

**Response:** The Hawai'i Wildfire Management Organization (HWMO) has been consulted as part of the early consultation for the Draft EA for the project. The Draft EA will incorporate the information from the North Kona Community Wildfire Protection Plan (CWPP) developed by the HWMO in 2021. This plan, as well as maps prepared for the United States Department of Agriculture and United States Forestry Service have been used to identify potential wildfire risks and wildfire prevention measures for the Makalapua Project District. Detailed discussions will be included in the Draft EA. The project will incorporate the recommendations in your comment, as much as practical.

**Comment No. 10**

*Cats prey on native birds, including State-listed endangered waterbirds, seabirds, and forest birds. Predation is instinctive and means that even well-fed cats will hunt and kill wildlife. Therefore, DOFAW recommends that homeowner associations request that residents with pet cats be kept indoors or safely contained. In addition, no feeding of feral cats should occur on the premises.*

**Response:** Thank you for raising awareness about the effect of pet and feral cats on native birds. Lili'uokalani Trust will work with future homeowner associations and operating companies for rental residential units to ensure that pet cats would be kept indoors and that no feeding of feral cats would occur on the premises, as much as practical.

Jason D. Omick  
February 28, 2024  
Page 6

Thank you again for your participation in the Chapter 343, Hawai'i Revised Statutes environmental review process. A copy of your letter and this response will be included in the Draft EA for this project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,

A handwritten signature in cursive script that reads "Yukino Uchiyama".

Yukino Uchiyama, AICP  
Manager

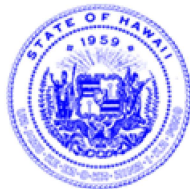
YU:de

cc: Bryan Esmeralda, Lili'uokalani Trust

Maya LeGrande, LeGrande Biological Surveys, Inc.

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**STATE OF HAWAII**  
**DEPARTMENT OF TRANSPORTATION**  
869 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813-5097

DIR 0670  
HWY-PL 23-2.3590

October 3, 2023

Ms. Yukino Uchiyama  
Munekiyo Hiraga  
305 High Street, Suite 104  
Wailuku, Hawaii 96793

Dear Ms. Uchiyama:

**Subject:** Early Consultation for Draft Environmental Assessment (DEA)  
Makalapua Project District  
Queen Kaahumanu Highway – North Kona, Hawaii Island, Hawaii  
Tax Map Key No: (3) 7-4-008: 002 (por.), (3) 7-4-010: 009, 010,  
(3) 7-4-025: 001, 002, 003, 005, 015, and 021

Thank you for your letter dated September 1, 2023, requesting for an early consultation in preparation of a DEA required by Hawaii Revised Statutes Chapter 343, triggered by the proposal of improvements and connections to state and county roadways. The applicant proposes a mixed-use project that will include 600 residential units, 220,900 square feet of commercial use, 2 hotels providing approximately 150 hotel rooms, and open space features. The proposed project includes the realignment of Makala Boulevard below the Commons Shopping Center to align with the Kailua's Old Airport Kona Park access. Access to the development will be from the Queen Kaahumanu Highway.

Based on the project information provided, the Hawaii Department of Transportation (HDOT) anticipates a potential adverse impact to Queen Kaahumanu Highway. Submit a Traffic Impact Analysis Report (TIAR) prepared and stamped by a licensed engineer. The TIAR and Environmental Assessment should include the following:

1. Description of existing trip generation at the site, existing traffic conditions and multimodal routes in the study area.
2. Forecasted traffic and multimodal conditions in the horizon year (year at full project build-out) both without the project and with the project. If the project construction is phased over multiple years, interim horizon years should be analyzed for the completion of each phase.
3. Analysis of existing and future safety conditions.

4. Recommendations of mitigations.

Determine applicability for the following HDOT permits:

1. Permit to Perform Work Upon State Highways is required for any work within the state highway right-of-way (ROW), (Hawaii Revised Statute [HRS] Chapter 264). The application includes the review and approval of construction drawings and a Traffic Management Plan.
2. Permit to Operate or Transport Oversize and/or Overweight Vehicles and Loads Over State Highways (HRS Chapter 291, Section 36).
3. Permit for the Occupancy and Use of State Highways (HRS Chapter 264). Note: This is applicable to underground and overhead power lines and utility pipelines within the state highway ROW.

The permit applications and instructions are available at the following link:  
<https://hidot.hawaii.gov/highways/home/doing-business/guide-to-permits>.

If you have any questions, please contact Jeyan Thirugnanam, Land Use Planning Engineer, Planning Branch, at (808) 587-6336 or by email at [jeyan.thirugnanam@hawaii.gov](mailto:jeyan.thirugnanam@hawaii.gov). Please reference file review number PL 2023-090.

Sincerely,



EDWIN H. SNIFFEN  
Director of Transportation

February 28, 2024

Edwin H. Sniffen, Director  
Hawai'i Department of Transportation  
869 Punchbowl Street  
Honolulu, Hawai'i 96813-5097

SUBJECT: Early Consultation for Proposed Makalapua Project District Project;  
Kailua-Kona, County of Hawai'i, Hawai'i

Dear Mr. Sniffen:

Thank you for your letter dated October 3, 2023 providing early consultation comments on the Proposed Makalapua Project District. On behalf of Lili'uokalani Trust, we offer the following information in response to the comments received.

**Comment No. 1**

*Based on the project information provided, the Hawaii Department of Transportation (HDOT) anticipates a potential adverse impact to Queen Kaahumanu Highway. Submit a Traffic Impact Analysis Report (TIAR) prepared and stamped by a licensed engineer. The TIAR and Environmental Assessment should include the following:*

1. *Description of existing trip generation at the site, existing traffic conditions and multimodal routes in the study area.*
2. *Forecasted traffic and multimodal conditions in the horizon year (year at full project build-out) both without the project and with the project. If the project construction is phased over multiple years, interim horizon years should be analyzed for the completion of each phase.*
3. *Analysis of existing and future safety conditions.*
4. *Recommendations of mitigations.*

**Response:** This information has been provided to the project's traffic engineer and the Traffic Impact Analysis Report (TIAR) for the project will address these items. The TIAR will be discussed and included in the Draft Environmental Assessment (EA).

**Comment No. 2**

*Determine applicability for the following HDOT permits:*

1. *Permit to Perform Work Upon State Highways is required for any work within the state highway right-of-way (ROW), (Hawaii Revised Statute (HRS) Chapter 264). The application includes the review and approval of construction drawings and a Traffic Management Plan.*
2. *Permit to Operate or Transport Oversize and/or Overweight Vehicles and Loads Over State Highways (HRS Chapter 291, Section 36).*
3. *Permit for the Occupancy and Use of State Highways (HRS Chapter 264). Note: This is applicable to underground and overhead power lines and utility pipelines within the state highway ROW.*

*The permit applications and instructions are available at the following link:  
<https://hidot.hawaii.gov/highways/home/doing-business/guide-to-permits>.*

**Response:** Applicable HDOT permits will be obtained by the contractor for any construction activities impacting the State highway right-of-way.

Thank you again for your participation in the Chapter 343, Hawai'i Revised Statutes environmental review process. A copy of your letter and this response will be included in the Draft EA for this project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



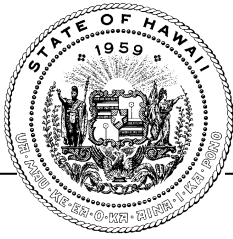
Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uokalani Trust

Matt Nakamoto, Austin, Tsutsumi and Associates, Inc.

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**STATE OF HAWAI‘I  
OFFICE OF PLANNING  
& SUSTAINABLE DEVELOPMENT**

**JOSH GREEN, M.D.**  
GOVERNOR

**SYLVIA LUKE**  
LT. GOVERNOR

**MARY ALICE EVANS**  
INTERIM DIRECTOR

235 South Beretania Street, 6th Floor, Honolulu, Hawai‘i 96813  
Mailing Address: P.O. Box 2359, Honolulu, Hawai‘i 96804

Telephone: (808) 587-2846  
Fax: (808) 587-2824  
Web: <https://planning.hawaii.gov/>

DTS 202309121632NA

Coastal Zone  
Management  
Program

September 29, 2023

Environmental Review  
Program

Land Use Commission

Land Use Division

Special Plans Branch

State Transit-Oriented  
Development

Statewide Geographic  
Information System

Statewide  
Sustainability Branch

Ms. Yukino Uchiyama, AICP  
Manager  
Munekiyo Hiraga  
305 High Street, Suite 104  
Wailuku, Hawai‘i 96793

Dear Ms. Uchiyama:

**Subject:** Early Consultation Request for a Draft Environmental Assessment on the Proposed Makalapua Project District, Keahuolū Ahupua‘a, North Kona District, Hawai‘i Island, TMK Nos (3)7-4-008:002(por.), (3)7-4-010:009, 010, (3)7-4-025:001, 002, 003, 005, 015 and 021

The Office of Planning and Sustainable Development (OPSD) has reviewed the information contained in the letter requesting comments for the preparation of a Draft Environmental Assessment (DEA) for the subject project, received September 12, 2023.

It is our understanding that the Makalapua Project District is envisioned to be a sustainable mixed-use community consisting of residential, commercial, office, hotel, and recreational uses. The Project District is described as being organized around an interconnected, pedestrian-oriented street network.

The proposed mixed-use project will include approximately 600 residential units with a mix of single-family and multi-family product types; approximately 220,900 square feet of commercial use, which may include office space, retail, civic/community, and food and beverage uses; and two hotels providing approximately 150 hotel rooms. The Project will provide at least five percent of open space in compliance with the County Kona Village Design Guidelines.

OPSD supports the project being reconsidered as a higher-density, mixed-use development that will meaningfully advance realization of the area’s transit-oriented development (TOD) Regional Commercial Center designation in the County’s Kona Community Development Plan (CDP). OPSD offers the following comments related to the preparation of the DEA and final project design and implementation.

1. Hawai'i Coastal Zone Management (CZM) Program

The CZM area is defined as “all lands of the State and the area extending seaward from the shoreline to the limit of the State’s police power and management authority, including the U.S. territorial sea” under Hawai'i Revised Statutes (HRS) § 205A-1.

Pursuant to HRS § 205A-4, in implementing the objectives of the CZM program, agencies shall consider ecological, cultural, historic, aesthetic, recreational, scenic, open space values, coastal hazards, and economic development. As the proposed action will require governmental approval, to aid in the agency decision making process, the DEA should include a discussion on the project’s consistency with the policies of the Hawai'i CZM Program, HRS § 205A-2, as amended. Furthermore, this analysis can be used as support material for the new SMA Use application.

a. Special Management Area

The material states the project site is located within the Special Management Area (SMA) as delineated by the County of Hawai'i, and a new SMA Use Permit will be sought for the project area to bring consistency with the proposed project district zoning. The DEA should provide a regional location map and include the project site’s proximity and relation to the designated SMA boundary and the shoreline.

Given that the subject Environmental Assessment (EA) may serve as a supporting document for the new SMA Use Permit application, we recommend that the EA specifically discuss compliance with the requirements of SMA use by consulting with the County of Hawai'i, Department of Planning.

b. Light Pollution in Coastal Areas

In enacting Act 224, Session Laws of Hawai'i 2005, the Legislature found that light pollution in Hawai'i’s coastal areas and artificial lighting illuminating the shoreline and ocean waters can be disruptive to avian and marine life. All exterior lighting for the proposed development should provide the necessary shielding to mitigate potential light pollution in the coastal areas and lessen possible seabird strikes. No artificial light, except as provided in HRS §§ 205A-30.5(b) and 205A-71(b), should be directed to travel across property boundaries toward the shoreline and ocean.

c. Climate Change Adaptation / Sea Level Rise (SLR)

The property site may be vulnerable to coastal hazards, including flooding,

storm surges, shoreline erosion, saltwater intrusion and groundwater elevation changes, and related natural disasters associated with climate change. To assess potential impacts of SLR and assess the vulnerability of the development site to SLR, we recommend the DEA refer to the findings of the *Hawai'i Sea Level Rise Vulnerability and Adaptation Report 2017*, accepted by the Hawai'i Climate Change Mitigation and Adaptation Commission.

The Report, and Hawaii Sea Level Rise Viewer at <https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/> particularly identifies a 3.2-foot sea level rise exposure area across the main Hawaiian Islands, which may occur in the mid- to latter half of the 21st century. The DEA should provide a map of 3.2-foot sea level rise exposure area in relation to the project area, and consider site-specific mitigation measures, including increasing the shoreline setbacks and elevation, in response to the potential impacts of SLR on the proposed development.

- d. Stormwater Runoff, Erosion, and Impact on Water Resources  
Pursuant to Hawai'i Administrative Rules (HAR) § 11-200.1-18(d)(7) the Draft EA should identify and analyze alternatives to protect surface water resources and sensitive lands in the North Kona and consider the impacts of stormwater inundation and sediment loading flowing onto and off the proposed project site, whether ensuing from construction activity or the project once developed.

Issues that may be examined include, but are not limited to, project site characteristics in relation to flood and erosion prone areas, vulnerability of the nearshore environment, and any increase in impermeable surfaces that may lead to an increased volume or rate of stormwater runoff. Development of mitigation measures for the protection for surface water resources and the coastal ecosystem should take this into account, pursuant to HAR § 11-200.1-18(d)(8).

2. Advancement of Sustainability Objectives in the *Hawai'i 2050 Sustainability Plan*  
The 2050 Sustainability Plan was prepared to guide the attainment of sustainability and resilience goals and objectives for the State contained in HRS Chapter 226, Hawai'i State Plan. To this end, the DEA should generally discuss the technologies and best practices and other mitigation measures for the project that would advance implementation of the Recommended Actions in the 2021-2030 Focus Areas on pages 100-107 of the [Hawai'i 2050 Sustainability Plan](#).

3. Transit-Oriented Development and Housing

Under HRS § 225M-2(b)(10), OPSD is the State lead in coordinating State and county transit-oriented development (TOD) planning and implementation and smart growth efforts statewide. In this capacity, OPSD encourages better utilization of urban lands in TOD-designated areas, such as the project site. OPSD recommends the DEA discuss how the project will align with Kona CDP Standards related to TOD, including but not limited to the following.

- a. TRAN-2.1 Connectivity Standards, in particular, the establishment of walkable blocks, connections to adjoining development mauka and makai as well as to Kona Village;
- b. TRAN-3.8 Multimodal Standards, including measures to support bus transit ridership, improving access to bus routes and stops, accommodations for pedestrian, bike, shared transportation service users, and micro-mobility within the project site as well as its immediate environs. The DEA should identify and map transit routes and stops and other proposed multimodal features that will serve the project;
- c. TRAN-4.1 Transportation Demand Management (TDM) Solutions, TRAN-4.2b Subsidizing commuter transit service, and TRAN-4.3a Managed Parking, identifying measures to be taken to support transportation mode shift from single-occupancy automobile use for both residents, business employees, and customers at the project site; and
- d. LU-2.5 Compliance with Village Design Guidelines, with attention to how the project will promote residential, business, and industrial densities at a mixed-use urban-scale that still preserves town or village character, with particular attention to the creation of streetscapes and an urban assemblage that activates the street and promotes walkability, bicycling, and active transportation.
- e. Affordable Housing. The DEA should provide information on the number of units, product types, unit sizes, densities, tenure, targeted Area Median Income groups, and length of affordability by product type for the proposed housing. Consideration might also be given to enabling housing throughout the project area, which could activate the entire site.
- f. Archaeological sites. The DEA should also discuss the treatment of the archeological sites within the project boundary, in terms of the measures to be taken to protect the sites from onsite residents and visitors and other project impacts, as well as to the potential program or interpretative measures that



Ms. Yukino Uchiyama  
September 29, 2023  
Page 5

might be taken to enable these sites to serve as a cultural resource and asset to the community.

- g. Water and wastewater infrastructure. OPSD is aware that the development in the Kona region is hindered by inadequate water and wastewater infrastructure capacity. The DEA should discuss project impacts on water resources, water supply and transmission systems, and wastewater collection and distribution systems, and what measures will need to be taken to ensure water and wastewater service and capacity for the project in the context of planned growth in the region.

Thank you for the opportunity to comment on the preparation of the DEA for this project. If you have any questions, please contact Ruby Edwards, Land Use Division, (808) 587-2817, or Joshua Hekeka, CZM Program, (808) 587-2845.

Sincerely,

A handwritten signature in black ink that reads "Mary Alice Evans". The signature is written in a cursive, slightly slanted style.

Mary Alice Evans  
Interim Director

c: Bryan Esmeralda, Lili'uokalani Trust

February 28, 2024

Mary Alice Evans, Interim Director  
State of Hawai'i  
Office of Planning and Sustainable Development  
235 South Beretania St. Sixth Floor  
Honolulu, Hawai'i 96804

**SUBJECT:** Early Consultation for Proposed Makalapua Project District Project;  
Kailua-Kona, County of Hawai'i, Hawai'i

Dear Ms. Evans:

Thank you for your letter dated September 29, 2023, providing early consultation comments on the Proposed Makalapua Project District. On behalf of Lili'uokalani Trust, we offer the following information in response to the comments received.

**Comment**

*OPSD supports the project being reconsidered as a higher-density, mixed-use development that will meaningfully advance realization of the area's transit-oriented development (TOD) Regional Commercial Center designation in the County's Kona Community Development Plan (CDP).*

**Response:** Thank you for expressing your support for the project.

**1. Hawai'i Coastal Zone Management (CZM) Program**

**Comment**

*The CZM area is defined as "all lands of the State and the area extending seaward from the shoreline to the limit of the State's police power and management authority, including the U.S. territorial sea" under Hawai'i Revised Statutes (HRS) § 205A-1.*

*Pursuant to HRS § 205A-4, in implementing the objectives of the CZM program, agencies shall consider ecological, cultural, historic, aesthetic, recreational, scenic, open space values, coastal hazards, and economic development. As the proposed action will require governmental approval, to aid in the agency decision making process, the DEA should include a*

*discussion on the project's consistency with the policies of the Hawai'i CZM Program, HRS § 205A-2, as amended. Furthermore, this analysis can be used as support material for the new SMA Use application.*

**Response:** Thank you for providing an overview of the Coastal Zone Management Program (CZM). The Draft Environmental Assessment (EA) will include a discussion on the project's consistency with the policies of the CZM program. Additionally, the Draft EA will be a primary supporting document in the Special Management Area (SMA) Use Permit application.

**a. Special Management Area**

**Comment**

*The material states the project site is located within the Special Management Area (SMA) as delineated by the County of Hawai'i, and a new SMA Use Permit will be sought for the project area to bring consistency with the proposed project district zoning. The DEA should provide a regional location map and include the project site's proximity and relation to the designated SMA boundary and the shoreline.*

*Given that the subject Environmental Assessment (EA) may serve as a supporting document for the new SMA Use Permit application, we recommend that the EA specifically discuss compliance with the requirements of SMA use by consulting with the County of Hawai'i, Department of Planning.*

**Response:** The Draft EA will include a regional location map as well as a map that shows the SMA boundary in relation to the proposed Makalapua Project District. The Draft EA will also include a discussion on the project's compliance with Rule 9, Special Management Area, of the Planning Commission Rules.

**b. Light Pollution in Coastal Areas**

**Comment**

*In enacting Act 224, Session Laws of Hawai'i 2005, the Legislature found that light pollution in Hawai'i's coastal areas and artificial lighting illuminating the shoreline and ocean waters can be disruptive to avian and marine life. All exterior lighting for the proposed development should provide the necessary shielding to mitigate potential light pollution in the coastal areas and lessen possible seabird strikes. No artificial light, except as provided in HRS §§205A-*

*30.5(b) and 205A-71(b), should be directed to travel across property boundaries toward the shoreline and ocean.*

**Response:** Although the project area is not immediately adjacent to the shoreline, any artificial lighting that may illuminate the shoreline will be shielded to mitigate potential light pollution in the coastal areas and to lessen possible seabirds strikes, in accordance with applicable provisions of Act 224.

**c. Climate Change Adaptation / Sea Level Rise (SLR)**

**Comment**

*The property site may be vulnerable to coastal hazards, including flooding, storm surges, shoreline erosion, saltwater intrusion and groundwater elevation changes, and related natural disasters associated with climate change. To assess potential impacts of SLR and assess the vulnerability of the development site to SLR, we recommend the DEA refer to the findings of the Hawai'i Sea Level Rise Vulnerability and Adaptation Report 2017, accepted by the Hawai'i Climate Change Mitigation and Adaptation Commission.*

*The Report, and Hawaii Sea Level Rise Viewer at <https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/> particularly identifies a 3.2-foot sea level rise exposure area across the main Hawaiian Islands, which may occur in the mid- to latter half of the 21st century. The DEA should provide a map of 3.2-foot sea level rise exposure area in relation to the project area, and consider site-specific mitigation measures, including increasing the shoreline setbacks and elevation, in response to the potential impacts of SLR on the proposed development.*

**Response:** The Draft EA will refer to the findings of the Hawai'i Sea Level Rise Vulnerability and Adaptation Report 2017 and include a map of the 3.2-foot sea level rise exposure area a discussion regarding the potential adverse impacts of sea level rise to the proposed project and site-specific mitigation measures, as may be applicable.

**d. Stormwater Runoff, Erosion, and Impact on Water Resources**

**Comment**

*Pursuant to Hawai'i Administrative Rules (HAR) § 11-200.1-18(d)(7) the Draft EA should identify and analyze alternatives to protect surface water resources and sensitive lands in the North Kona and*

*consider the impacts of stormwater inundation and sediment loading flowing onto and off the proposed project site, whether ensuing from construction activity or the project once developed.*

Issues that may be examined include, but are not limited to, project site characteristics in relation to flood and erosion prone areas, vulnerability of the nearshore environment, and any increase in impermeable surfaces that may lead to an increased volume or rate of stormwater runoff. Development of mitigation measures for the protection for surface water resources and the coastal ecosystem should take this into account, pursuant to HAR § 11-200.1- 18(d)(8).

**Response:** An Infrastructure Report is being prepared for the project and will be included and discussed in the Draft EA. The Infrastructure Report will analyze the existing and future drainage conditions for the project area and include preliminary strategies for construction BMPs and necessary long-term drainage improvements for the Makalapua Project District. In addition to stormwater, potential flood impacts are also discussed in the Draft EA. This comment has been shared with the project's civil engineer for review and incorporation to the Infrastructure Report.

2. **Advancement of Sustainability Objectives in the Hawai'i 2050 Sustainability Plan**

**Comment**

*The 2050 Sustainability Plan was prepared to guide the attainment of sustainability and resilience goals and objectives for the State contained in HRS Chapter 226, Hawai'i State Plan. To this end, the DEA should generally discuss the technologies and best practices and other mitigation measures for the project that would advance implementation of the Recommended Actions in the 2021-2030 Focus Areas on pages 100-107 of the Hawai'i 2050 Sustainability Plan.*

**Response:** The Draft EA will include a discussion on sustainable technologies and other mitigation measures that are being considered for incorporation into the Makalapua Project District. The Draft EA will also include a discussion of the project's applicability to the Hawai'i 2050 Sustainability Plan.

### 3. **Transit-Oriented Development and Housing**

#### **Comment**

*Under HRS § 225M-2(b)(10), OPSD is the State lead in coordinating State and county transit-oriented development (TOD) planning and implementation and smart growth efforts statewide. In this capacity, OPSD encourages better utilization of urban lands in TOD-designated areas, such as the project site. OPSD recommends the DEA discuss how the project will align with Kona CDP Standards related to TOD, including but not limited to the following:*

- a. *TRAN-2.1 Connectivity Standards, in particular, the establishment of walkable blocks, connections to adjoining development mauka and makai as well as to Kona Village;*
- b. *TRAN-3.8 Multimodal Standards, including measures to support bus transit ridership, improving access to bus routes and stops, accommodations for pedestrian, bike, shared transportation service users, and micro-mobility within the project site as well as its immediate environs. The DEA should identify and map transit routes and stops and other proposed multi modal features that will serve the project;*
- c. *TRAN-4.1 Transportation Demand Management (TDM) Solutions, TRAN-4.2b Subsidizing commuter transit service, and TRAN-4.3a Managed Parking, identifying measures to be taken to support transportation mode shift from single-occupancy automobile use for both residents, business employees, and customers at the project site; and*
- d. *LU-2.5 Compliance with Village Design Guidelines, with attention to how the project will promote residential, business, and industrial densities at a mixed use urban-scale that still preserves town or village character, with particular attention to the creation of streetscapes and an urban assemblage that activates the street and promotes walkability, bicycling, and active transportation.*
- e. *Affordable Housing. The DEA should provide information on the number of units, product types, unit sizes, densities, tenure, targeted Area Median Income groups, and length of affordability by product type for the proposed housing. Consideration might also be given to enabling housing throughout the project area, which could activate the entire site.*
- f. *Archaeological sites. The DEA should also discuss the treatment of the archeological sites within the project boundary, in terms of the measures to be taken to protect the sites from onsite residents and*

*visitors and other project impacts, as well as to the potential program or interpretative measures that might be taken to enable these sites to serve as a cultural resource and asset to the community.*

- g. *Water and wastewater infrastructure. OPSD is aware that the development in the Kona region is hindered by inadequate water and wastewater infrastructure capacity. The DEA should discuss project impacts on water resources, water supply and transmission systems, and wastewater collection and distribution systems, and what measures will need to be taken to ensure water and wastewater service and capacity for the project in the context of planned growth in the region.*

**Response:** The Draft EA will discuss how the project will align with Kona Community Development Plan (CDP) Standards related to transit-oriented development (TOD).

Thank you again for your participation in the Chapter 343, Hawai'i Revised Statutes environmental review process. A copy of your letter and this response will be included in the Draft EA for this project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

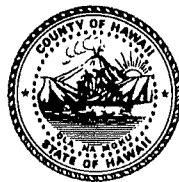
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cc: Bryan Esmeralda, Lili'uokalani Trust  
Keith Uemura, Park Engineering

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**Mitchell D. Roth**  
Mayor

**Lee Lord**  
Managing Director



**Ramzi I. Mansour**  
Director

**Brenda Iokepa-Moses**  
Deputy Director

# County of Hawai'i

## DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

345 Kekūanāo'a Street, Suite 41 · Hilo, Hawai'i 96720 · cohdem@hawaiicounty.gov

Ph: (808) 961-8083 · Fax: (808) 961-8086

### MEMORANDUM

**TO:** Munekiyo Hiraga  
Attention: Yukino Uchiyama, AICP  
305 High Street, Suite 104  
Wailuku, Hawai'i 96793

**FROM:** Ramzi I. Mansour, Director *Brenda Iokepa-Moses*  
Department of Environmental Management

**DATE:** September 20, 2023

**SUBJECT:** Early Consultation Request for Proposed Makalapua Project District, Keahuolu Ahupua'a, North Kona District, Hawai'i Island, TMK Nos. (3) 7-4-008:002(por.), (3) 7-4-010:009, 010, (3) 74-4-025:001, 002, 003, 005, 015, and 021

The Solid Waste Division has reviewed the subject application and has provides the following comments (Contact the Solid Waste Division for more details):

- Ample room should be provided for rubbish and recycling
- Submit Solid Waste Management Plan in accordance with attached guidelines

The Wastewater Division has reviewed the subject application and provides the following comments (contact the Wastewater Division for details):

- Applicant shall conduct a sewer study in accordance with the applicable wastewater system design standards prior to approval to connect to the County sewer system. Applicant shall provide sewer line or other facility improvements as the Director of Environmental Management may reasonably require for mitigation of impacts of the proposed project. Contact Wastewater Division Chief for details.



February 28, 2024

Ramzi I. Mansour, Director  
County of Hawai'i  
Department of Environmental Management  
345 Kekūanāo'a Street, Suite 41  
Hilo, Hawai'i 96720

SUBJECT: Early Consultation for Proposed Makalapua Project District Project;  
Kailua-Kona, County of Hawai'i, Hawai'i

Dear Mr. Mansour:

Thank you for your letter dated September 20, 2023 providing early consultation comments on the Proposed Makalapua Project District. On behalf of Lili'uokalani Trust, we offer the following information in response to the comments received.

**Solid Waste Division Comments**

**Comment No. 1**

*Ample room should be provided for rubbish and recycling*

**Response:** Lili'uokalani Trust will ensure to include ample space for rubbish and recycling in the plans for the Makalapua Project District.

**Comment No. 2**

*Submit Solid Waste Management Plan in accordance with attached guidelines*

**Response:** Lili'uokalani Trust will prepare and submit a Solid Waste Management Plan in accordance with all relevant guidelines.

**Wastewater Division Comments**

**Comment No 3**

*Applicant shall conduct a sewer study in accordance with the applicable wastewater system design standards prior to approval to connect to the County sewer system. Applicant shall provide sewer line or other facility improvements as the Director of Environmental Management may reasonably require for mitigation of impacts of the proposed project. Contact Wastewater Division Chief for details.*

**Response:** An Infrastructure Report has been prepared and includes detailed sewer analysis for the Makalapua Project District. The Infrastructure Report will be included and discussed in the Draft Environmental Assessment (EA). Lili'uokalani Trust will provide necessary sewer improvements for the project and will comply with applicable wastewater system design standards and will obtain required approvals prior to connecting to the County sewer system.

Thank you again for your participation in the Chapter 343, Hawai'i Revised Statutes environmental review process. A copy of your letter and this response will be included in the Draft EA for this project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

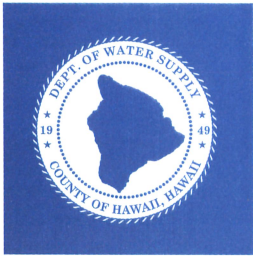
Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de  
cc: Bryan Esmeralda, Lili'uokalani Trust  
Keith Uemura, Park Engineering

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**DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII**

345 KEKŪANAŌ'A STREET, SUITE 20 • HILO, HAWAII 96720  
TELEPHONE (808) 961-8050 • FAX (808) 961-8657

October 11, 2023

Ms. Yukino Uchiyama  
Munekiyo Hiraga  
305 High Street, Suite 104  
Wailuku, HI 96793

Dear Ms. Uchiyama:

**Subject: Pre-Environmental consultation for Proposed Makalapua Project District  
Keahuolū, North Kona, Hawai'i  
Tax Map Key: 7-4-008:002 (portion), 7-4-025:001, 002, 003, 005, 012, 015, 017, 021, 022,  
and 7-4-010:009 and 010**

This is in response to your Pre-Environmental Assessment letter dated September 1, 2023.

QLT shall provide a revised development plan or water master plan for review and approval, prepared by a professional engineer licensed in the State of Hawai'i, showing how the QLT proposes to provide water at adequate pressure and volume under peak-flow and fire-flow conditions. Any water improvements should coincide with the phasing. The water master plan should include estimated maximum daily water usage calculations, showing the anticipated water demand for all proposed land uses within the development. The water usage calculations shall include the estimated maximum daily water demand in gallons per day and the estimated peak flow in gallons per minute.


We request that QLT address the non-potable demand of water or irrigation by using alternate methods (ie. reclaimed or reuse water).

Construction plans, prepared by a professional engineer licensed in the State of Hawai'i, shall be submitted for review and approval. QLT shall be responsible for the relocation and adjustment of the Department's affected water system facilities, should they be necessary.

Water service will be subject to the terms of the agreement and upon completion and dedication of the required water system improvements.

Should there be any questions, please contact Mr. Ryan Quitoriano of our Water Resources and Planning Branch at 961-8070, extension 256.

Sincerely yours,

  
Keith K. Okamoto, P.E.  
Manager-Chief Engineer

RQ:klem

February 28, 2024

Keith Okamoto, P.E. , Manager-Chief Engineer  
County of Hawai'i  
Department of Water Supply  
345 Kekuanao'a Street, Suite 20  
Hilo, Hawai'i 96720

**SUBJECT: Early Consultation for Proposed Makalapua Project District Project;  
Kailua-Kona, County of Hawai'i, Hawai'i**

Dear Mr. Okamoto:

Thank you for your letter dated October 11, 2023, providing early consultation comments on the Proposed Makalapua Project District. On behalf of Lili'uokalani Trust, we offer the following information in response to the comments received.

**Comment No. 1**

*QLT shall provide a revised development plan or water master plan for review and approval, prepared by a professional engineer licensed in the State of Hawai'i, showing how the QLT proposes to provide water at adequate pressure and volume under peak-flow and fire-flow conditions. Any water improvements should coincide with the phasing. The water master plan should include estimated maximum daily water usage calculations, showing the anticipated water demand for all proposed land uses within the development. The water usage calculations shall include the estimated maximum daily water demand in gallons per day and the estimated peak flow in gallons per minute.*

**Response:** An Infrastructure Report has been prepared for the project and includes discussions on the estimated maximum water usage and anticipated water demand for all proposed land uses within the Makalapua Project District. The Infrastructure Report will be included and discussed in the Draft Environmental Assessment (EA).

**Comment No. 2**

*We request that QLT address the non-potable demand of water or irrigation by using alternate methods (i.e. reclaimed or reuse water).*

**Response:** The Infrastructure Report included in the EA addresses consideration for use of non-potable water for irrigation.

**Comment No. 3**

*Construction plans, prepared by a professional engineer licensed in the State of Hawaii, shall be submitted for review and approval. QLT shall be responsible for the relocation and adjustment of the Department's affected water system facilities, should they be necessary.*

**Response:** Construction plans will be submitted to your Department for review and approval. Lili'uokalani Trust recognizes its responsibility for relocation and adjustment of water systems impacted by the Makalapua Project District.

**Comment No. 4**

*Water service will be subject to the terms of the agreement and upon completion and dedication of the required water system improvements.*

**Response:** Lili'uokalani Trust acknowledges water service will be subject to terms and agreements upon completion and dedication of the required water system improvements.

Thank you again for your participation in the Chapter 343, Hawai'i Revised Statutes environmental review process. A copy of your letter and this response will be included in the Draft EA for this project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

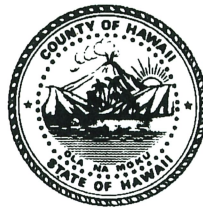
cc: Bryan Esmeralda, Lili'uokalani Trust  
Keith Uemura, Park Engineering

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**Mitchell D. Roth**  
*Mayor*

**Lee E. Lord**  
*Managing Director*

**Robert H. Command**  
*Deputy Managing Director*



**Susan K. Kunz**  
*Housing Administrator*

**Harry M. Yada**  
*Assistant Housing Administrator*

**County of Hawai'i**  
**Office of Housing and Community Development**

1990 Kino'ole Street, Suite 102 • Hilo, Hawai'i 96720 • (808) 961-8379 • Fax (808) 961-8685  
Existing Housing: (808) 959-4642 • Fax (808) 959-9308  
Kona: (808) 323-4300 • Fax (808) 323-4301

September 20, 2023

**Via U.S. Mail**

Munekiyo Hiraga  
Attention: Yukino Uchiyama, AICP  
305 High Street, Suite 104  
Wailuku, Hawai'i 96793

**SUBJECT: OHCD RESPONSE TO PROPOSED MAKALAPUA PROJECT DISTRICT  
TMK Nos (3) 7-4-008:002, (3)7-4-010:009, 010, (3)7-4-028:001, 002, 003, 005,  
015, and 021**

The County of Hawai'i Office of Housing and Community Development (OHCD) is in receipt of your letter dated September 1, 2023 regarding the request for consultation for the proposed Makalapua Project District located at TMK numbers (3)7-4-008:002, (3)7-4-010:009, 010, (3)7-4-028:001, 002, 003, 005, 015, and 021 and provides the following comments on the subject project.

The section regarding "Project Background and Land Use Context" states that Liliuokalani Trust (LT) desires a district Boundary Amendment for a portion of the project. It is also stated that LT intends to rezone the entire Makalapua District as a "Project District".

The proposed actions described by the applicant in both scenarios trigger an affordable housing condition, in accordance with Chapter 11, Housing Policy, of the Hawai'i County Code (HCC). The requirements may vary, due to the various zoning designations, as described in §11-4 HCC. OHCD urges the Applicant to review this section for specific details on the number of housing credits that will be required to be earned based on the number of residential units, and the full-time equivalent jobs generated by the hotel and commercial businesses, and to work closely with our office to meet the Conditions of any zoning changes, per Chapter 11.

Thank you for the opportunity comment. Should you have any additional questions, please don't hesitate to contact Cristina Pineda at [Cristina.Pineda@hawaiicounty.gov](mailto:Cristina.Pineda@hawaiicounty.gov).

  
\_\_\_\_\_  
Susan K. Kunz  
Housing Administrator

3284pcmp





February 28, 2024

Susan K. Kunz, Housing Administrator  
County of Hawai'i  
Office of Housing and Community Department  
1990 Kino'ole Street, Suite 102  
Hilo, Hawai'i 96702

**SUBJECT:** Early Consultation for Proposed Makalapua Project District Project;  
Kailua-Kona, County of Hawai'i, Hawai'i

Dear Ms. Kunz:

Thank you for your letter dated September 20, 2023 providing early consultation comments on the Proposed Makalapua Project District. On behalf of Lili'uokalani Trust, we offer the following information in response to the comments received.

**Comment**

*The proposed actions described by the applicant in both scenarios trigger an affordable housing condition, in accordance with Chapter 11, Housing Policy, of the Hawai'i County Code (HCC). The requirements may vary, due to the various zoning designations, as described in §11-4 HCC. OHCD urges the Applicant to review this section for specific details on the number of housing credits that will be required to be earned based on the number of residential units, and the fulltime equivalent jobs generated by the hotel and commercial businesses, and to work closely with our office to meet the Conditions of any zoning changes, per Chapter 11.*

**Response:** The Makalapua Project District will comply with Chapter 11, Housing Policy, of the Hawai'i County Code (HCC). Lili'uokalani Trust will continue to consult with your Department to ensure compliance with applicable provisions of Chapter 11, HCC.

Susan Kunz  
February 28, 2024  
Page 2

Thank you again for your participation in the Chapter 343, Hawai'i Revised Statutes environmental review process. A copy of your letter and this response will be included in the Draft Environmental Assessment for this project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,

A handwritten signature in cursive script that reads "Yukino Uchiyama".

Yukino Uchiyama, AICP  
Manager

YU:de

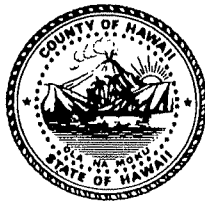
cc: Bryan Esmeralda, Lili'uokalani Trust

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SEP 28 2023

**Mitchell D. Roth**  
*Mayor*



**Benjamin T. Moszkowicz**  
*Police Chief*

**Reed K. Mahuna**  
*Acting Deputy Police Chief*

## **County of Hawai`i**

### **POLICE DEPARTMENT**

349 Kapi`olani Street • Hilo, Hawai`i 96720-3998  
(808) 935-3311 • Fax (808) 961-2389

September 25, 2023

Munekiyo Hiraga  
Attention: Yukino Uchiyama, AICP  
305 High Street, Suite 104  
Wailuku, Hawai`i 96793

Aloha Ms. Uchiyama,

**SUBJECT: EARLY CONSULTATION REQUEST FOR PROPOSED MAKALAPUA PROJECT DISTRICT, KEAHUOLŪ AHUPUA`A, NORTH KONA DISTRICT, HAWAI`I ISLAND, TMK NOS. (3)7-4-008:002(POR.), (3)7-4-010:009, 010, (3)7-4-025:001, 002, 003, 005, 015, AND 021**

This is in response to your letter dated September 1, 2023 of which you requested comments relating to the proposed Makalapua Project District.

We appreciate the opportunity for the Hawai`i Police Department to comment on this project. We`ve reviewed the contents and also looked at the preliminary overview of the Makalapua Project District submission dated June 5, 2019.

One noted concern is how this project will affect traffic flow, and if evacuation routes are sufficient, as this area borders the tsunami evacuation zone. The overview submitted in 2019 addresses this in part, with a "future route extension" to extend to Queen Kaahumanu Highway, south of Hale Maka`i Place. However, the planned extension appears to reach Queen Kaahumanu Highway where there is no traffic light, and the only option for motorists would be to turn south onto Queen Kaahumanu Highway. A suggestion would be to connect the extension to Hale Makai Place, east of the water treatment plant, so motorists have the option to turn left onto Queen Kaahumanu Highway, alleviating traffic from the Queen Kaahumanu Highway / Makala Boulevard intersection.

Munekiyo Hiraga  
September 25, 2023  
Page 2

If you would like to discuss this concern in further detail, please contact Sergeant Brandon Mansur of our Kona Community Policing Section, at [brandon.mansur@hawaiicounty.gov](mailto:brandon.mansur@hawaiicounty.gov), or via phone at (808) 326-4646, extension 259.

Sincerely,

A handwritten signature in black ink, appearing to be "B. Moszkowicz", written over a circular stamp or seal.

for  
BENJAMIN T. MOSZKOWICZ  
POLICE CHIEF

CD/bm  
19HQ0807

February 28, 2024

Benjamin Moszkowicz, Police Chief  
County of Hawai'i  
Hawai'i Police Department  
349 Kapi'olani Street  
Hilo, Hawai'i 96720-3998

**SUBJECT: Early Consultation for Proposed Makalapua Project District Project;  
Kailua-Kona, County of Hawai'i, Hawai'i**

Dear Chief Moszkowicz:

Thank you for your letter dated September 25, 2023 providing early consultation comments on the Proposed Makalapua Project District. On behalf of Lili'uokalani Trust, we offer the following information in response to the comments received.

**Comment**

*One noted concern is how this project will affect traffic flow, and if evacuation routes are sufficient, as this area borders the tsunami evacuation zone. The overview submitted in 2019 addresses this in part, with a "future route extension" to extend to Queen Kaahumanu Highway, south of Hale Maka'i Place. However, the planned extension appears to reach Queen Kaahumanu Highway where there is no traffic light, and the only option for motorists would be to turn south onto Queen Kaahumanu Highway. A suggestion would be to connect the extension to Hale Makai Place, east of the water treatment plant, so motorists have the option to turn left onto Queen Kaahumanu Highway, alleviating traffic from the Queen Kaahumanu Highway / Makala Boulevard intersection.*

**Response:** No new connections of Kuakini Highway to Queen Ka'ahumanu Highway are currently planned to be completed as part of the Makalapua Project District. Currently, access from the Makalapua Project District to Queen Ka'ahumanu Highway is provided by Makala Boulevard, Kaiwi Street, and Palani Road.

Benjamin Moszkowicz  
February 28, 2024  
Page 2

Thank you again for your participation in the Chapter 343, Hawai'i Revised Statutes environmental review process. A copy of your letter and this response will be included in the Draft Environmental Assessment for this project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uokalani Trust

Matt Nakamoto, Austin, Tsutsumi and Associates, Inc.

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December 5, 2023

Mr. Yukino Uchiyama, AICP  
 Manager  
 Munekiyo Hiraga  
 305 High Street, Suite 104  
 Wailuku, Hawaii 96793

Dear Mr. Uchiyama:

Subject: Early Consultation Request for Proposed Makalapua Project District  
 Keahuolu Ahupua'a, North Kona District, Hawaii Island  
 TMK Nos. (3)7-4-008:002(por), (3)7-4-010:009, 010, (3)7-4-025:001,  
 002, 003, 005, and 021  
Plan Review and Comment

In response to your letter dated September 1, 2023, please be advised that Hawaii Gas maintains underground utility gas service lines in the project vicinity, which serves multiple buildings in the surrounding area. We would appreciate your consideration during the project planning and design process to minimize any potential conflicts with the existing gas facilities in the project area.

Thank you for the opportunity to comment on the Early Consultation. We are interested in providing gas energy services for the project and are available to consult on the gas requirements. Should there be any questions, or if additional information is desired, please call Wayne Daimaru at 808-329-0639.

Sincerely,

Hawaii Gas

Keith K. Yamamoto  
 Manager, Engineering

KKY:krs

February 28, 2024

Keith Yamamoto, Manager, Engineering  
Hawai'i Gas  
P.O. Box 3000  
Honolulu, Hawai'i 96802-3000

**SUBJECT: Early Consultation for Proposed Makalapua Project District Project;  
Kailua-Kona, County of Hawai'i, Hawai'i**

Dear Mr. Yamamoto:

Thank you for your letter dated December 5, 2023 providing early consultation comments on the Proposed Makalapua Project District. On behalf of Lili'uokalani Trust, we offer the following information in response to the comments received.

**Comment:**

*Please be advised that Hawaii Gas maintains underground utility gas service lines in the project vicinity, which serves multiple buildings in the surrounding area. We would appreciate your consideration during the project planning and design process to minimize any potential conflicts with the existing gas facilities in the project area.*

**Response:** Thank you for your comment, Lili'uokalani Trust is aware that there are underground utility gas service lines in the project vicinity serving surrounding buildings. Lili'uokalani Trust will continue to consult with Hawai'i Gas as the planning and design processes progress to ensure the existing gas facilities are not impacted during construction.

Keith Yamamoto  
February 28, 2024  
Page 2

Thank you again for your participation in the Chapter 343, Hawai'i Revised Statutes environmental review process. A copy of your letter and this response will be included in the Draft Environmental Assessment for this project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,

A handwritten signature in cursive script that reads "Yukino Uchiyama".


Yukino Uchiyama, AICP  
Manager

YU:de


cc: Bryan Esmeralda, Lili'uokalani Trust

Keith Uemura, Park Engineering

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**LETTERS RECEIVED DURING  
THE DRAFT ENVIRONMENTAL  
ASSESSMENT REVIEW PERIOD  
AND RESPONSES TO  
SUBSTANTIVE COMMENTS**





# X. LETTERS RECEIVED DURING THE DRAFT ENVIRONMENTAL ASSESSMENT REVIEW PERIOD AND RESPONSES TO SUBSTANTIVE COMMENTS

The Draft EA for the subject action was filed and published in the Office of Planning and Sustainable Development, Environmental Review Program, Environmental Notice on March 8, 2024. The following agencies and organizations were sent a copy of the Draft EA. Comments on the Draft EA were received during the 30-day public comment period. Letters received as well as responses to substantive comments are included in this Chapter.

## Federal Agencies

1. Mr. Gerald Gregory, District Conservationist  
U.S. Department of Agriculture-NRCS,  
Natural Resources Conservation Service  
77 Ho'okele Street, Suite 202  
Kahului, HI 96732
2. Mr. Ryan Okahara, Field Office Director  
U. S. Department of Housing and Urban Development  
1132 Bishop Street, Suite 1400  
Honolulu, HI 96813-4918
3. Ms. Jen Martin, Interim Chief  
U.S. Department of the Army,  
Regulatory Branch,  
U.S. Army Corps of Engineers,  
Honolulu District Regulatory Branch,  
Building 230  
Fort Shafter, HI 96858-5440  
Via email: [CEPOH-RO@usace.army.mil](mailto:CEPOH-RO@usace.army.mil)
4. Ms. Jan Yukumoto  
U.S. Environmental Protection Agency  
Region 9  
Pacific Islands Contact Office  
P.O. Box 50003  
300 Ala Moana Blvd., Room 5124  
Honolulu, HI 96850
5. Mr. Earl Campbell, Project Leader  
U.S. Fish and Wildlife Service –  
Pacific Islands Fish and Wildlife Office  
300 Ala Moana Blvd., Rm. 3-122  
Honolulu, HI 96850  
Via email: [pifwo\\_admin@fws.gov](mailto:pifwo_admin@fws.gov)

## State of Hawai'i

6. Senator Dru Mamo Kanuha  
Senate District 3  
Kona, Ka'ū, Volcano  
Hawai'i State Capitol, Room 206  
415 South Beretania St.  
Honolulu, HI 96813
7. Representative Nicole Lowen  
House District 7  
Kailua-Kona, Honokōhau, Kalaoa,  
Pu'uana'hulu, Puakō, portion of  
Waikoloa  
Hawai'i State Capitol Room 436  
415 South Beretania St.  
Honolulu, HI 96813
8. Mr. Keith Regan, Comptroller  
State of Hawai'i  
Department of Accounting and General  
Services  
1151 Punchbowl Street, #426  
Honolulu, HI 96813
9. Ms. Sharon Hurd, Chair  
State of Hawai'i  
Department of Agriculture  
1428 South King Street  
Honolulu, HI 96814-2512
10. Mr. James Kunane Tokioka, Director  
State of Hawai'i  
Department of Business, Economic  
Development & Tourism  
P.O. Box 2359  
Honolulu, HI 96804

11. Ms. Nadine Ando, Director  
State of Hawai'i  
Department of Commerce and  
Consumer Affairs  
335 Merchant Street  
Honolulu, HI 96813
12. Mr. Keith Hayashi, Superintendent  
State of Hawai'i  
Department of Education  
P. O. Box 2360  
Honolulu, HI 96804
13. Mr. Kali Watson, Chair  
State of Hawai'i  
Department of Hawaiian Home Lands  
P. O. Box 1879  
Honolulu, HI 96805
14. Dr. Kenneth S. Fink, MD, MGA, MPH,  
Director  
State of Hawai'i  
Department of Health  
1250 Punchbowl St., Room 325  
Honolulu, HI 96813
15. Mr. Alec Wong, P.E., Chief  
State of Hawai'i  
Department of Health, Clean Water  
Branch  
Environmental Management Division  
Hale Ola, Room 225  
2827 Waimano Home Road  
Pearl City, HI 96782
16. Ms. Kathleen Ho, Deputy Director  
State of Hawai'i  
Department of Health,  
Environmental Health Administration  
1250 Punchbowl Street  
Honolulu, HI 96813
17. Ms. Sina Pruder, P.E., Chief  
State of Hawai'i  
Department of Health, Wastewater  
Branch  
Environmental Management Division  
Hale Ola Building  
2827 Waimano Home Road, Room 207  
Pearl City, HI 96782
18. State of Hawai'i  
Environmental Management Division  
Department of Health, Kona Sanitation  
Branch  
Keakalanui Building  
79-1020 Haukapila Street, Room 115  
Kona, HI 96750
19. Ms. Lene Ichinotsubo  
State of Hawai'i  
Department of Health, Solid and  
Hazardous Waste Branch  
Environmental Management Division  
2827 Waimano Home Road, Suite 100  
Pearl City, HI 96782-1407
20. Ms. Dawn N. S. Chang, Chairperson  
State of Hawai'i  
Department of Land and Natural  
Resources  
P. O. Box 621  
Honolulu, HI 96809  
Via email: [dlnr@hawaii.gov](mailto:dlnr@hawaii.gov) and  
[dlnr.land@hawaii.gov](mailto:dlnr.land@hawaii.gov)
21. Mr. Dean Uyeno, Interim Deputy  
Director  
State of Hawai'i  
Department of Land and Natural  
Resources  
Commission on Water Resource  
Management  
P.O. Box 621  
Honolulu, HI 96809  
Via email: [dlnr@hawaii.gov](mailto:dlnr@hawaii.gov) and  
[dlnr.land@hawaii.gov](mailto:dlnr.land@hawaii.gov)
22. Mr. Ed Sniffen, Director  
State of Hawai'i  
Department of Transportation  
869 Punchbowl Street, Room 509  
Honolulu, HI 96813-5097
23. Mr. Dean Minakami, Executive Director  
State of Hawai'i  
Hawai'i Housing Finance and  
Development Corporation (HHFDC)  
677 Queen Street  
Honolulu, HI 96813

24. Ms. Stacy Kealohalani Ferreira, Chief  
Executive Officer  
State of Hawai'i  
Office of Hawaiian Affairs  
560 N. Nimitz Highway, Suite 200  
Honolulu, HI 96817

25. Ms. Mary Alice Evans, Acting Director  
State of Hawai'i  
Office of Planning and Sustainable  
Development, Environmental Review  
Program  
235 South Beretania Street, Room 702  
Honolulu, HI 96813

26. Mr. Dan Orodener, Executive Officer  
State of Hawai'i  
Land Use Commission, DBEDT  
P.O. Box 2359  
Honolulu, HI 96804

### **County of Hawai'i**

27. Honorable Mitch Roth, Mayor  
Mayor's Office - West Hawai'i  
County of Hawai'i  
74-5044 Ane Keohokalole Hwy., Bldg. C  
Kailua-Kona, HI 96740

28. Honorable Dr. Holeka Goro Inaba,  
Council Vice Chair  
County of Hawai'i, District 8  
(North Kona)  
West Hawaii Civic Center  
74-5044 Ane Keohokālole Hwy,  
Building A  
Kailua-Kona, HI 96740

29. Ms. Rebecca Villegas, Councilmember  
County of Hawai'i, District 7  
(Portion of Kona and South Kona)  
West Hawaii Civic Center  
74-5044 Ane Keohokālole Hwy,  
Building A  
Kailua-Kona, HI 96740

30. Mr. Talmadge Magno, Administrator  
County of Hawai'i  
Civil Defense Agency  
920 Ululani Street  
Hilo, HI 96720

31. Mr. Ramzi Mansour, Director  
County of Hawai'i  
Department of Environmental  
Management  
25 Aupuni Street  
Hilo, HI 96720

32. Mr. Maurice Messina, Director  
County of Hawai'i  
Department of Parks and Recreation  
101 Pauahi Street, Suite 6  
Hilo, HI 96720

33. Mr. Steve Pause, P.E., Director  
County of Hawai'i  
Department of Public Works  
101 Pauahi Street, Suite 7  
Hilo, HI 96720

34. Mr. Keith Okamoto, P.E., Manager-Chief  
Engineer  
County of Hawai'i  
Department of Water Supply  
345 Keuanao'a Street, Suite 20  
Hilo, HI 96720

35. Chief Kazuo Todd, Fire Chief  
County of Hawai'i  
Fire Department  
25 Aupuni Street, Suite 2501  
Hilo, HI 96720

36. Mr. Victor Kandle, Mass Transit  
Administrator  
County of Hawai'i  
Mass Transit Agency  
25 Aupuni Street  
Hilo, HI 96720

37. Ms. Susan Kunz, Housing Administrator  
County of Hawai'i  
Office of Housing and Community  
Development  
1990 Kino'ole Street, Suite 102  
Hilo, HI 96720

38. Mr. Zendo Kern, Director  
County of Hawai'i  
Planning Department  
101 Pauahi Street, Suite 3  
Hilo, HI 96720

39. Chief Benjamin Moszkowicz, Police  
Chief  
County of Hawai'i  
Police Department  
349 Kapi'olani Street  
Hilo, HI 96720

### **County of Hawai'i Organizatons**

40. Ms. Jacqui Hoover  
Hawai'i Leeward Planning Conference  
P.O. Box 2159  
Kamuela, HI 96743

41. Hawai'i Electric Light Company, Inc,  
P.O. Box 1027  
Hilo, HI 96721-1027

42. Oceanic Time Warner Cable  
548 Kanoelehua Avenue  
Hilo, HI 96720

43. The Gas Company  
945 Kalaniana'ole Street  
Hilo, HI 96720

44. Community Enterprises  
C/O Fred Housel  
74-5063 Tomi Tomi Drive  
Kailua-Kona, HI 96740

45. People's Alliance for Trails Hawai'i  
(PATH)  
P.O. Box 621  
Kailua-Kona, HI 96740

46. Superintendent Paul Scolari  
Kaloko-Honokohau National Historical  
Park  
National Park Service,  
73-4786 Kanalani Street #14  
Kailua-Kona, HI 96740

47. Kona Village Business Improvement  
District  
75-5751 Kuakini Highway #202  
Kailua-Kona, HI 96740

48. Ms. Nani Barretto and  
Ms. Elizabeth Pickett  
Co-Executive Directors  
Hawai'i Wildfire Management  
Organization  
65-1279 Kawaihae Road  
Kamuela, HI 96743

MAR 20, 2024

JOSH GREEN, M.D.  
GOVERNOR  
KE KIA'ĀINA



KEITH A. REGAN  
COMPTROLLER  
KA LUNA HO'OMALU HANA LAULĀ

MEOH-LENG SILLIMAN  
DEPUTY COMPTROLLER  
KA HOPE LUNA HO'OMALU HANA LAULĀ

**STATE OF HAWAII | KA MOKU'ĀINA O HAWAII**  
**DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES | KA 'OIHANA LOIHELU A LAWELAWÉ LAULĀ**  
P.O. BOX 119, HONOLULU, HAWAII 96810-0119

(P)24.043

**MAR 18 2024**

Yukino Uchiyama  
Munekiyo Hiraga  
305 High Street, Suite 104  
Wailuku, Hawaii 96793

Dear Yukino Uchiyama:

Subject: Draft Environmental Assessment for Proposed Makalapua Project District  
Kailua-Kona, Hawaii  
TMKs: (3) 7-4-008:002 (por.), (3) 7-4-010:009, 010, (3) 7-4-025:001, 002,  
003, 005, 015, 021

Thank you for the opportunity to provide comments on the subject project. The project does not impact any of the Department of Accounting and General Services' projects or existing facilities, and we have no comments to offer at this time.

If you have any questions, your staff may call David DePonte of the Planning Branch at (808) 586-0492, or email at david.c.deponte@hawaii.gov.

Sincerely,

Gordon S. Wood  
Acting Public Works Administrator

DD:mo

c: Zendo Kern, County of Hawaii  
Roger Ross, DAGS Hawaii  
Miles Tagawa, DAGS Hawaii

October 1, 2024

Gordon S. Wood, Acting Public Works Administrator  
State of Hawai'i  
Department of Accounting and General Services  
P.O. Box 119  
Honolulu, Hawai'i 96810-0119

**SUBJECT: Draft Environmental Assessment for the Proposed Makalapua Project District Project; Kailua-Kona, County of Hawai'i, Hawai'i**

Dear Mr. Wood:

Thank you for your letter dated March 18, 2024 on the Draft Environmental Assessment (EA) for the Proposed Makalapua Project District Project. On behalf of the Lili'uokalani Trust, we acknowledge that the project does not impact any of the Department of Accounting and General Services' (DAGS) projects or existing facilities and the DAGS has no comments to offer at this time.

We appreciate your review of the Draft EA and will include a copy of your letter along with this response letter in the Final EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uokalani Trust  
K:\DATA\LT\Makalapua PD 1875\Draft EA\Draft EA 2023\Response Letters\DAGS.docx



STATE OF HAWAII  
DEPARTMENT OF EDUCATION  
KA 'OIHANA HO'ONA'AUAO  
P.O. BOX 2360  
HONOLULU, HAWAII 96804

OFFICE OF FACILITIES AND OPERATIONS

March 27, 2024

Yukino Uchiyama, Manager  
Munekiyo Haraga  
305 High Street, Suite 104  
Wailuku, Hawaii 96793

Re: Draft Environmental Assessment for the Proposed Makalapua Project District  
TMK (3)7-4-008:002 (por.), (3)7-4-010:009 and 010, (3)7-4-025:001, 002, 003, 005,  
015, and 021, Kailua-Kona, Hawaii, Hawaii

Dear Ms. Uchiyama:

Thank you for your letter dated March 6, 2024. The Hawaii State Department of Education (Department) previously provided comments, dated September 21, 2023. We would like to provide the most recent enrollment numbers for the schools.

The proposed Makalapua Project District is expected to serve Kealakehe Elementary, Kealakehe Intermediate, and Kealakehe High School. As of the 2023-2024 academic year:

- Kealakehe Elementary has a student count of 889
- Kealakehe Intermediate has a student count of 690
- Kealakehe High has a student count of 1,397

Projected enrollment for the next five years suggests that the three schools will operate below capacity.

Should you have any questions, please contact Cori China, Professional Worker for the Facilities Development Branch, Planning Section, at (808) 784-5080 or via email at [cori.china@k12.hi.us](mailto:cori.china@k12.hi.us).

Sincerely,

Roy Ikeda  
Interim Public Works Manager  
Planning Section

RI:ctc

c: Zendo Kern, County of Hawaii, Planning Department  
Janette Snelling, Honokaa-Kealakehe-Kohala-Konawaena Complex Area  
Facilities Development Branch

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER



October 1, 2024

Roy Ikeda, Interim Public Works Manager  
State of Hawai'i  
Department of Education  
Planning Section  
P.O. Box 2360  
Honolulu, Hawai'i 96804

**SUBJECT: Draft Environmental Assessment for the Proposed Makalapua Project District Project, Kailua-Kona, County of Hawai'i, Hawai'i**

Dear Mr. Ikeda:

Thank you for your letter dated March 27, 2024 providing comments on the Draft Environmental Assessment (EA) for the Proposed Makalapua Project District Project. On behalf of the Lili'uokalani Trust (LT), we acknowledge that the schools expected to serve this region are Kealakehe Elementary, Kealakehe Intermediate, and Kealakehe High Schools and that the Department of Education projects them all to be operating below capacity for the next five (5) years. We appreciate the updated enrollment numbers provided. This information will be included in the Final EA.

We appreciate your input and will include a copy of your letter along with this response letter in the Final EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,

Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uokalani Trust

K:\DATA\LT\Makalapua PD 1875\Draft EA\Draft EA 2023\Response Letters\DOE.docx



JOSH GREEN, M.D.  
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE  
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



DAWN N. S. CHANG  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA  
LAND DIVISION

P.O. BOX 621  
HONOLULU, HAWAII 96809

April 5, 2024

County of Hawaii  
Planning Department  
Attn: Mr. Zendo Kern, Planning Director  
101 Pauahi Street, Suite 3  
Hilo, Hawaii 96720

via email: [planning@hawaiicounty.gov](mailto:planning@hawaiicounty.gov)

Munekiyo Hiraga  
Attn: Ms. Yukino Uchiyama, AICP  
305 High Street, Suite 104  
Wailuku, Hawaii 96793

via email: [planning@munekiyohiraga.com](mailto:planning@munekiyohiraga.com)

Dear Mr. Kern and Ms. Uchiyama:

SUBJECT: Draft Environmental Assessment for **Makalapua Project District** located at Kailua-Kona, Island of Hawaii; TMKs: (3) 7-4-008:002 (por.), (3) 7-4-010:009 and 010, and (3) 7-4-025: 001, 002, 003,005, 015, and 021 on behalf of County of Hawaii, Planning Department

Thank you for the opportunity to review and comment on the subject matter. The Land Division of the Department of Land and Natural Resources (DLNR) distributed or made available a copy of your request pertaining to the subject matter to DLNR's Divisions for their review and comments.

At this time, enclosed are comments from the (a) Engineering Division, (b) Office of Conservation & Coastal Lands, and (c) Land Division-Hawaii District on the subject matter. Should you have any questions, please feel free to contact Darlene Nakamura at (808) 587-0417 or email: [darlene.k.nakamura@hawaii.gov](mailto:darlene.k.nakamura@hawaii.gov). Thank you.

Sincerely,

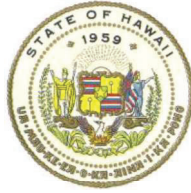
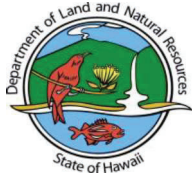
*Russell Tsuji*

Russell Y. Tsuji  
Land Administrator

Enclosures  
cc: Central Files

JOSH GREEN, M.D.  
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE  
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



DAWN N. S. CHANG  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA  
LAND DIVISION

P.O. BOX 621  
HONOLULU, HAWAII 96809

March 8, 2024

**MEMORANDUM**

FROM: ~~TO:~~

**DLNR Agencies:**

- Div. of Aquatic Resources ([Kendall.I.tucker@hawaii.gov](mailto:Kendall.I.tucker@hawaii.gov))
- Div. of Boating & Ocean Recreation
- Engineering Division** ([DLNR.ENGR@hawaii.gov](mailto:DLNR.ENGR@hawaii.gov))
- Div. of Forestry & Wildlife ([rubyrosa.t.terrago@hawaii.gov](mailto:rubyrosa.t.terrago@hawaii.gov))
- Div. of State Parks
- Commission on Water Resource Management ([DLNR.CWRM@hawaii.gov](mailto:DLNR.CWRM@hawaii.gov))
- Office of Conservation & Coastal Lands ([sharleen.k.kuba@hawaii.gov](mailto:sharleen.k.kuba@hawaii.gov))
- Land Division – Hawaii District ([gordon.c.heit@hawaii.gov](mailto:gordon.c.heit@hawaii.gov))
- Aha Moku Advisory Committee ([leimana.k.damate@hawaii.gov](mailto:leimana.k.damate@hawaii.gov))

TO: ~~FROM:~~ Russell Y. Tsuji, Land Administrator *Russell Tsuji*  
 SUBJECT: Draft Environmental Assessment for **Makalapua Project District**  
 LOCATION: Kailua-Kona, Island of Hawaii; TMKs: (3) 7-4-008:002 (por.), (3) 7-4-010:009 and 010, and (3) 7-4-025: 001, 002, 003,005, 015, and 021  
 APPLICANT: Munekiyo Hiraga on behalf of County of Hawaii, Planning Department

Transmitted for your review and comment is information on the above-referenced subject matter. The DEA was published on March 8, 2024, by the State Environmental Review Program (formerly the Office of Environmental Quality Control) at the Office of Planning and Sustainable Development in the periodic bulletin, The Environmental Notice, available at the following link:

[https://files.hawaii.gov/dbedt/erp/The\\_Environmental\\_Notice/2024-03-08-TEN.pdf](https://files.hawaii.gov/dbedt/erp/The_Environmental_Notice/2024-03-08-TEN.pdf)

Please submit any comments by **April 5, 2024**. If no response is received by this date, we will assume your agency has no comments. Should you have any questions, please contact Darlene Nakamura directly via email at [darlene.k.nakamura@hawaii.gov](mailto:darlene.k.nakamura@hawaii.gov). Thank you.

**BRIEF COMMENTS:**

- We have no objections.
- We have no comments.
- We have no additional comments.
- Comments are included/attached.

Signed: *CS*  
 Print Name: Carty S. Chang, Chief Engineer  
 Division: Engineering Division  
 Date: Mar 22, 2024

Attachments  
cc: Central Files

JOSH GREEN, M.D.  
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE  
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



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DAWN N. S. CHANG  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT

STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA  
LAND DIVISION

P.O. BOX 621  
HONOLULU, HAWAII 96809

March 8, 2024

**MEMORANDUM**

TO:

**DLNR Agencies:**

- Div. of Aquatic Resources ([Kendall.I.tucker@hawaii.gov](mailto:Kendall.I.tucker@hawaii.gov))
- Div. of Boating & Ocean Recreation
- Engineering Division ([DLNR.ENGR@hawaii.gov](mailto:DLNR.ENGR@hawaii.gov))
- Div. of Forestry & Wildlife ([rubyrosa.t.terrago@hawaii.gov](mailto:rubyrosa.t.terrago@hawaii.gov))
- Div. of State Parks
- Commission on Water Resource Management ([DLNR.CWRM@hawaii.gov](mailto:DLNR.CWRM@hawaii.gov))
- Office of Conservation & Coastal Lands ([sharleen.k.kuba@hawaii.gov](mailto:sharleen.k.kuba@hawaii.gov))
- Land Division – Hawaii District ([gordon.c.heit@hawaii.gov](mailto:gordon.c.heit@hawaii.gov))
- Aha Moku Advisory Committee ([leimana.k.damate@hawaii.gov](mailto:leimana.k.damate@hawaii.gov))

RECEIVED  
OFFICE OF CONSERVATION  
AND COASTAL LANDS  
2024 MAR - 8 P 4: 26  
DEPT OF LAND &  
NATURAL RESOURCES  
STATE OF HAWAII

FROM:

Russell Y. Tsuji, Land Administrator *Russell Tsuji*

SUBJECT:

Draft Environmental Assessment for **Makalapua Project District**

LOCATION:

Kailua-Kona, Island of Hawaii; TMKs: (3) 7-4-008:002 (por.), (3) 7-4-010:009 and 010, and (3) 7-4-025: 001, 002, 003,005, 015, and 021

APPLICANT:

Munekiyo Hiraga on behalf of County of Hawaii, Planning Department

Transmitted for your review and comment is information on the above-referenced subject matter. The DEA was published on March 8, 2024, by the State Environmental Review Program (formerly the Office of Environmental Quality Control) at the Office of Planning and Sustainable Development in the periodic bulletin, The Environmental Notice, available at the following link:

[https://files.hawaii.gov/dbedt/erp/The\\_Environmental\\_Notice/2024-03-08-TEN.pdf](https://files.hawaii.gov/dbedt/erp/The_Environmental_Notice/2024-03-08-TEN.pdf)

Please submit any comments by **April 5, 2024**. If no response is received by this date, we will assume your agency has no comments. Should you have any questions, please contact Darlene Nakamura directly via email at [darlene.k.nakamura@hawaii.gov](mailto:darlene.k.nakamura@hawaii.gov). Thank you.

**BRIEF COMMENTS:**

*Not in the Conservation District*

- We have no objections.
- We have no comments.
- We have no additional comments.
- Comments are included/attached.

Signed:

*[Signature]*

Print Name:

*K. Tiger Milk*

Division:

*DLNR Ocean*

Date:

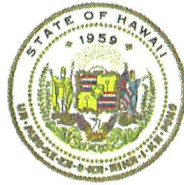
*3/11/2024*

Attachments

cc: Central Files

JOSH GREEN, M.D.  
GOVERNOR | KE KIA'AINA

SYLVIA LUKE  
LIEUTENANT GOVERNOR | KA HOPE KIA'AINA



DAWN N. S. CHANG  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT

STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA  
LAND DIVISION

P.O. BOX 621  
HONOLULU, HAWAII 96809

March 8, 2024

**MEMORANDUM**

TO: **DLNR Agencies:**  
 Div. of Aquatic Resources ([Kendall.I.tucker@hawaii.gov](mailto:Kendall.I.tucker@hawaii.gov))  
 Div. of Boating & Ocean Recreation  
 Engineering Division ([DLNR.ENGR@hawaii.gov](mailto:DLNR.ENGR@hawaii.gov))  
 Div. of Forestry & Wildlife ([rubyrosa.t.terrago@hawaii.gov](mailto:rubyrosa.t.terrago@hawaii.gov))  
 Div. of State Parks  
 Commission on Water Resource Management ([DLNR.CWRM@hawaii.gov](mailto:DLNR.CWRM@hawaii.gov))  
 Office of Conservation & Coastal Lands ([sharleen.k.kuba@hawaii.gov](mailto:sharleen.k.kuba@hawaii.gov))  
 Land Division – Hawaii District ([gordon.c.heit@hawaii.gov](mailto:gordon.c.heit@hawaii.gov))  
 Aha Moku Advisory Committee ([leimana.k.damate@hawaii.gov](mailto:leimana.k.damate@hawaii.gov))

FROM: Russell Y. Tsuji, Land Administrator *Russell Tsuji*  
SUBJECT: Draft Environmental Assessment for **Makalapua Project District**  
LOCATION: Kailua-Kona, Island of Hawaii; TMKs: (3) 7-4-008:002 (por.), (3) 7-4-010:009 and 010, and (3) 7-4-025: 001, 002, 003,005, 015, and 021  
APPLICANT: Munekiyo Hiraga on behalf of County of Hawaii, Planning Department

Transmitted for your review and comment is information on the above-referenced subject matter. The DEA was published on March 8, 2024, by the State Environmental Review Program (formerly the Office of Environmental Quality Control) at the Office of Planning and Sustainable Development in the periodic bulletin, The Environmental Notice, available at the following link:

[https://files.hawaii.gov/dbedt/erp/The Environmental Notice/2024-03-08-TEN.pdf](https://files.hawaii.gov/dbedt/erp/The_Environmental_Notice/2024-03-08-TEN.pdf)

Please submit any comments by **April 5, 2024**. If no response is received by this date, we will assume your agency has no comments. Should you have any questions, please contact Darlene Nakamura directly via email at [darlene.k.nakamura@hawaii.gov](mailto:darlene.k.nakamura@hawaii.gov). Thank you.

**BRIEF COMMENTS:**

- We have no objections.
- We have no comments.
- We have no additional comments.
- Comments are included/attached.

Signed: *Gordon Heit*  
Print Name: Gordon Heit  
Division: Land Division  
Date: March 28, 2024

Attachments  
cc: Central Files

October 1, 2024

Russell Tsuji, Land Administrator  
State of Hawai'i  
Department of Land and Natural Resources  
Land Division  
P.O. Box 621  
Honolulu, Hawai'i, 96809

SUBJECT: Draft Environmental Assessment for the Proposed Makalapua Project District Project; Kailua-Kona, County of Hawai'i, Hawai'i

Dear Mr. Tsuji:

Thank you for your letter dated April 5, 2024 on the Draft Environmental Assessment (EA) for the Proposed Makalapua Project District Project. On behalf of the Lili'uokalani Trust, we acknowledge that the Engineering Division, and the Office of Conservation and Coastal Lands (OCCL) have no comments to offer at this time and the Land Division, Hawai'i District of your Department has no objections to the project. We also acknowledge the note from the OCCL that the project is not located in the State Conservation District.

We appreciate your review of the Draft EA and will include a copy of your letter along with this response letter in the Final EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uokalani Trust  
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**STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'**  
**DEPARTMENT OF TRANSPORTATION | KA 'OIHANA ALAKAU**  
869 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813-5097

IN REPLY REFER TO:

DIR0000191  
HWY-PL 24-2.35071

April 15, 2024

Mr. Zendo Kern  
Planning Director  
County of Hawaii  
Planning Department  
101 Pauahi Street, Suite 3  
Hilo, Hawaii 96720

Dear Mr. Kern:

**Subject:** Request for Comment - Draft Environmental Assessment (DEA)  
Proposed Makalapua Project District  
Kailua-Kona, Hawaii  
Tax Map Key No. (3) 7-4-008: 002 (portion); (3) 7-4-010: 009, 010,  
(3) 7-4-025: 001, 002, 003, 005, 015, and 021

Thank you for your letter requesting our comments on the required DEA under Hawaii Revised Statutes Chapter 343 due to the use of state lands and funds. We apologize for the delay of the response.

The applicant proposes to develop 69.5 acres of land in Kailua-Kona comprising of 600 residential units, 150 hotel rooms, and 220,900 square-feet of commercial mixed use. Phase One is planned for completion by the year 2027 and Phase Two by 2032. Access to the project site will be from the state-owned Queen Kaahumanu Highway via Makala Boulevard and/or the Kuakini Highway, which is county owned.

The Hawaii Department of Transportation has the following comments:

1. The Traffic Impact Analysis Report (TIAR) dated December 2023 contained within the DEA has been reviewed and acknowledged. We concur with the study's Conclusion and Recommendations (page 70-75) which states:
  - a. By Year 2042, the listed intersections with Queen Kaahumanu Highway (Makala Boulevard, Palani Road, Loloku Street, Kaiwi Street, and Palani Road) are expected to operate with movements at overcapacity conditions if mitigation at those intersections remain uncompleted.

- b. Year 2032 – The recommended roadway improvements to widen Queen Kaahumanu Highway from two through lanes to three through lanes in the southbound direction at the following:
  1. Makala Boulevard intersection to the Eho Street intersection
  2. Queen Kaahumanu Highway/Makala Boulevard intersection
- c. Year 2042 – The recommended roadway improvements to widen Queen Kaahumanu Highway from two through lanes to three through lanes in the northbound direction at the following:
  1. Makala Boulevard/Eho Street intersection
  2. Queen Kaahumanu Highway/Makala Boulevard intersection
  3. Queen Kaahumanu Highway/Palani Road intersection

Therefore, the applicant is responsible for providing all traffic improvements and mitigations for direct or local traffic impact(s) necessitated by the proposed development at no cost to the state, and/or shall participate in the fair share/pro-rata funding.

2. The DEA should be revised to confirm the location of the site's access points (or study alternatives), since it was not stated in the TIAR.
3. The TIAR (page 78) should be re-evaluated based on the 2023 Federal Highway Administration Manual on Uniform Traffic Control Devices that will be adopted on October 1, 2024.

If you have any questions, please contact Jeyan Thirugnanam, Land Use Planning Engineer, Planning Branch at (808) 587-6336 or by email at [jeyan.thirugnanam@hawaii.gov](mailto:jeyan.thirugnanam@hawaii.gov). Please reference file review number PL 2024-026.

Sincerely,



EDWIN H. SNIFFEN  
Director of Transportation

c: Munekiyo Hiraga

October 1, 2024

Mr. Edwin Sniffen, Director  
State of Hawai'i  
Department of Transportation  
869 Punchbowl Street, Room 509  
Honolulu, Hawai'i 96813-5097

**SUBJECT:** Draft Environmental Assessment for the Proposed Makalapua Project District Project; Kailua-Kona, County of Hawai'i, Hawai'i

Dear Mr. Sniffen:

Thank you for your letter dated April 15, 2024 providing comments on the Draft Environmental Assessment (EA) for the Proposed Makalapua Project District Project. On behalf of the Lili'uokalani Trust (LT), we offer the following information in response to the comments received:

**Response to Comment No. 1:** The improvements to Queen Kaahumanu Highway will be triggered by other projects and/or ambient growth in the region in addition to the Makalapua Project District. As such, LT is willing to pay on a fair-share/pro-rata basis, for these improvements.

**Response to Comment No. 2:** Access to the Makalapua Project District will be provided from the existing Makala Boulevard, Kuakini Highway, Loloku Street, and Kaiwi Street. Additionally, improvements are planned to the existing Ma'a Way and Pawai Place to extend these roadways past their current termini through to the northern boundary of the project to provide additional interior access points. At this stage, the locations of additional interior access points are unknown and will be developed as further planning of the individual blocks continues. Locations of these access points will be coordinated with the County of Hawai'i, Department of Public Works as may be required. The traffic engineer for the project does not believe this will affect the findings of the Traffic Impact Analysis Report (TIAR). Furthermore, as the project progresses, the TIAR will be updated as needed to reflect any changes to the project conceptual plan and its timing of development.



**Response to Comment No. 3:** The TIAR has been updated to include reference to the 2023 Federal Highway Administration Manual on Uniform Traffic Control Devices.

We appreciate your input and will include a copy of your letter along with this response letter in the Final EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uoklani Trust  
Claire Tsuha, Austin, Tsutsumi & Associates, Inc.

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# LAND USE COMMISSION

*Komikina Ho'ohana 'Āina*

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

*Ka 'Oihana Ho'omōhala Pā'oihana, 'Imi Wai wai a Ho'omāka'ika'i*

235 S. Beretania Street, RM 406, Honolulu, Hawai'i 96813

Mailing Address: P.O. Box 2359, Honolulu, Hawai'i 96804

Email Address: [dbedt.luc.web@hawaii.gov](mailto:dbedt.luc.web@hawaii.gov)

JOSH GREEN, M.D.

GOVERNOR

SYLVIA LUKE

LT. GOVERNOR

DANIEL ORODENKER

LUC EXECUTIVE OFFICER

Telephone: (808) 587-3822

Fax: (808) 587-3827

Website: [luc.hawaii.gov](http://luc.hawaii.gov)

March 28, 2024

Yukino Uchiyama, Manager  
Munekiyo Hiraga  
305 High Street, Suite 104  
Wailulu, Hawai'i 96793  
[planning@munekiyohiraga.com](mailto:planning@munekiyohiraga.com)

Zendo Kern, Planning Director  
County of Hawai'i  
Planning Department  
101 Pauahi Street, Suite 3  
Hilo, Hawai'i 96720  
[planning@hawaiiicounty.gov](mailto:planning@hawaiiicounty.gov)

SUBJECT: Draft Environmental Assessment Makalapua Project District TMKs. (3)7-4-008:002 (por.), (3)7-4-010:009 and 010, (3)7-4-025:001, 002, 003, 005, 015, and 021

Dear Ms.Uchiyama and Mr.Kern:

Thank you for providing the Land Use Commission ("LUC" or Commission") with the Draft Environmental Assessment ("DEA") for the Makalapua Project District. LUC staff has reviewed the DEA and provides the following comments and questions:

### **Sections I and III: State Land Use Commission District Boundary Amendment**

The DEA indicates that most of the project site for the proposed Makalapua Project District has been previously designated Urban by the LUC, and the additional 14.96 acres currently designated Agricultural land.

Please provide a table that includes the breakdown of proposed uses with their respective acreage which are to be included in the 14.96 acre district boundary amendment.

The LUC Staff suggests that the County Planning Commission make detailed findings with regard to the justification for the boundary of the 14.96 acres, otherwise it may appear that the proposed project is parceling in order to circumvent appearing before the Land Use Commission.

### **Section II A- 10-11: Archeological, Historical, and Cultural Resources**

The DEA includes an archaeological study which was accepted by the State Historic Preservation Division in 2019. However, based on LUC Staff review, the DEA does not include a clearly labeled and identified Ka Pa'akai Analysis.

Please include a Ka Pa'akai Analysis that includes the following:

1. The identity and scope of “valued cultural, historical, or natural resources” including the extent to which traditional customary Native Hawaiian rights are exercised in the petition area;
2. The extent to which those resources, including traditional and customary Native Hawaiian rights, will be affected or impaired by the proposed action;
3. The feasible action, if any, to be taken to reasonably protect Native Hawaiian rights if they are found to exist.

### **Section II A- 14-15: Green House Gas and Climate Change**

The proposed development is described as a “sustainable mixed-use community,” please ensure collaboration with the State Sustainability Coordinator of the Statewide Sustainability Program within the Office of Planning and Sustainable Development to solicit review and comment.

### **Section II D: Infrastructure- Water and Other Allocated Resources**

The DEA indicates that water units are not yet secured for the proposed development, and in the letter from the Department of Water Supply asks for a revised development plan or water master plan for review and approval of water credits.

The DEA indicates that the Makalapua Project District is within the Keauhou Aquifer System, and it is Staff's understanding that the Keauhou Aquifer is strained and non-regenerative. Staff is concerned that continuous and overuse may increase the salinity of the water, thus impacting future developments, Native Hawaiian resources and practices, and coastal and nearshore environments.

Land Use Commission Staff has concerns that the water allocations associated with pre-approved developments facilitated by Lili'uokalani Trust may be used or traded for the allotment in this proposed development. The same concern is applicable to other allocated resources associated with Lili'uokalani Trust Developments in Kona.

Please provide a more detailed discussion identifying the potential options available for securing water for the proposed project.

DEA Makalapua Project District  
March 28, 2024  
Page 3

**Section II D-3: Infrastructure- Wastewater System**

Sanitary wastewater will be conveyed and treated at the Kealakehe Wastewater Treatment plant.

Land Use Commission Staff suggests the existing conditions and mitigation section of the DEIS mention the ongoing lawsuit that involves the County of Hawai'i and the Federal Water Pollution Control Act.

Should you have any questions, please contact our office, at (808) 587-3823 or via email at [dbedt.luc.web@hawaii.gov](mailto:dbedt.luc.web@hawaii.gov).

Sincerely,

A handwritten signature in black ink, consisting of several loops and a horizontal line extending to the right.

Daniel Orodener  
Executive Officer  
Land Use Commission  
State of Hawai'i

October 1, 2024

Daniel Orodener, Executive Officer  
State of Hawai'i  
Department of Business, Economic Development & Tourism  
Land Use Commission  
P.O. Box 2359  
Honolulu, Hawai'i 96804

**SUBJECT:** Draft Environmental Assessment for the Proposed Makalapua Project District Project; Kailua-Kona, County of Hawai'i, Hawai'i

Dear Mr. Orodener:

Thank you for your letter dated March 28, 2024 providing comments on the Draft Environmental Assessment (EA) for the Proposed Makalapua Project District (MPD) Project. On behalf of the Lili'uokalani Trust (LT), we offer the following information in response to the comments received:

**Comment No. 1:**

***Sections I and III: State Land Use Commission District Boundary Amendment***

*The DEA indicates that most of the project site for the proposed Makalapua Project District has been previously designated Urban by the LUC, and the additional 14.96 acres currently designated Agricultural land.*

*Please provide a table that includes the breakdown of proposed uses with their respective acreage which are to be included in the 14.96 acre district boundary amendment.*

*The LUC Staff suggests that the County Planning Commission make detailed findings with regard to the justification for the boundary of the 14.96 acres, otherwise it may appear that the proposed project is parceling in order to circumvent appearing before the Land Use Commission.*

**Response:** As requested, a table depicting the breakdown of proposed uses within the 14.96-acre area proposed to be redistricted from Agriculture to Urban with their respective acreages is provided below. This information will also be included in the Final EA for the project.

Land Use Program	Acreage
Multi-Family Residential	2.12
Single-Family Residential	10.02
Commercial	0.64
Archaeological Site	1.69
Roadway (Ma'a Way)	0.49
<b>SUBTOTAL</b>	<b>14.96</b>

In addition, it is noted that in 2015, LT petitioned the Land Use Commission (LUC) to modify its 1991 Decision and Order for Docket No. A89-646 related to a previous District Boundary Amendment (DBA) in which a 212.333-acre portion of LT's lands makai of Queen Ka'ahumanu Highway (referred to as Urban Phase III) were incrementally redistricted to the "Urban" district upon the substantial development of lands mauka of Queen Ka'ahumanu Highway (referred to as Urban Phases I and II). The requested modification was to remove the Urban Phase III lands from the docket and petition area of the original DBA. The request also stipulated that a portion of land less than 15 acres be removed from Urban Phase III so that it could later be redistricted to "Urban" and developed as part of the future MPD.

The modification was approved by the LUC on April 21, 2016. Finding of Fact No. 27 from the Decision and Order of the modification includes testimony from LT that it would not develop the remainder of the Urban Phase III lands without obtaining prior approval of the LUC and that LT would not seek to redistrict other portions of Urban Phase III in less than 15-acre increments, except for the portion to be included in the MPD project. The reclassification of the MPD site, in a less than 15-acre increment, has long been envisioned and was represented to the LUC at the time of the 2016 modification. It is noted that the MPD is separate from, and not a component of the larger Keahuolū Land Plan. The modification Decision and Order is attached as **Exhibit 1** herein and will be included in the Final EA.

**Comment No. 2:**

**Section II A- 10-11: Archeological, Historical, and Cultural Resources**

*The DEA includes an archaeological study which was accepted by the State Historic Preservation Division in 2019. However, based on LUC Staff review, the DEA does not include a clearly labeled and identified Ka Pa'akai Analysis.*

*Please include a Ka Pa'akai Analysis that includes the following:*

1. *The identity and scope of “valued cultural, historical, or natural resources” including the extent to which traditional customary Native Hawaiian rights are exercised in the petition area;*
2. *The extent to which those resources, including traditional and customary Native Hawaiian rights, will be affected or impaired by the proposed action;*
3. *The feasible action, if any, to be taken*

**Response:** The Cultural Impact Assessment (CIA) for the project has been updated to include a clearly labeled Ka Pa‘akai analysis as requested. The updated CIA will be included and discussed in the Final EA.

**Comment No. 3:**

**Section II A- 14-15: Green House Gas and Climate Change**

*The proposed development is described as a “sustainable mixed-use community,” please ensure collaboration with the State Sustainability Coordinator of the Statewide Sustainability Program within the Office of Planning and Sustainable Development to solicit review and comment.*

**Response:** The Draft EA was provided to the Office of Planning and Sustainable Development (OPSD) on March 6, 2024, and separately sent directly to the State Sustainability Coordinator at the OPSD on April 4, 2024, for review and comment, however, no comment was provided by the OPSD nor the State Sustainability Coordinator.

**Comment No. 4:**

**Section II D: Infrastructure- Water and Other Allocated Resources**

*The DEA indicates that water units are not yet secured for the proposed development, and in the letter from the Department of Water Supply asks for a revised development plan or water master plan for review and approval of water credits.*

*The DEA indicates that the Makalapua Project District is within the Keauhou Aquifer System, and it is Staff’s understanding that the Keauhou Aquifer is strained and non-regenerative. Staff is concerned that continuous and overuse may increase the salinity of the water, thus impacting future developments, Native Hawaiian resources and practices, and coastal and nearshore environments.*

*Land Use Commission Staff has concerns that the water allocations associated with pre-approved developments facilitated by Lili'uokalani Trust may be used or traded for the allotment in this proposed development. The same concern is applicable to other allocated resources associated with Lili'uokalani Trust Developments in Kona.*

*Please provide a more detailed discussion identifying the potential options available for securing water for the proposed project.*

**Response:** In its response to the County of Hawai'i Department of Water Supply's (DWS) early consultation comment letter, it was noted that (in lieu of a revised development plan or water master plan) an Infrastructure Report was prepared for the project that includes discussions on the estimated maximum water usage and anticipated water demand for all proposed land uses within the MPD. The Infrastructure Report, as well as the response letter to the DWS were included in the published Draft EA and will also be included in the Final EA.

LT currently has sufficient available water credits that may be used to service the calculated demand generated by the MPD under the Keahuolū Lands Water Resources Development Agreement (KLWRA) and the Makalapua Business Center Water Commitment (MBCWC) with the DWS. It should be noted that although LT has enough water credits to accommodate the MPD at this time, LT's other planned projects in Kona are in various planning stages and will also require water credits. As such, LT is in the process of developing a new regional water source which is intended to be dedicated to the County once completed. In addition to meeting water needs for LT's other planned projects in Kona, this new water source would provide water for the County's future water needs in the Kona region.

The plan for this new water source is to drill a new well into the deep confined aquifer, a water source below the basal lens that currently does not have any active production wells. In studying this water source, LT's consultant team reasonably believes drawing from this source would not impact coastal and nearshore environments as this source discharges further offshore. This new well source seeks to tap the deep-confined freshwater aquifer under saltwater and basal water bodies that is understood to discharge far offshore into deeper waters is not anticipated to impact nearshore tidal groundwater dependent ecosystems or deep water offshore cultural practices. As this is a new well, LT is in the process of preparing well construction and pump installation permit applications to be submitted to the Commission on Water Resource Management (CWRM). As part of this permitting process, a Ka Pa'akai analysis has been conducted to assess what impacts, if any, the new well would have on traditional and customary Native Hawaiian practices. In addition, LT has



been in consultation with both CWRM and the DWS on its well plans. The DWS has approved the location of the proposed well and engineering plans.

Regarding the concern of trading approved water allocations, LT notes that the KLWRA and MBCWC referenced above set forth parameters for use of the water allocations.

**Comment No. 5:**

***Section II D-3: Infrastructure- Wastewater System***

*Sanitary wastewater will be conveyed and treated at the Kealakehe Wastewater Treatment plant.*

*Land Use Commission Staff suggests the existing conditions and mitigation section of the DEIS mention the ongoing lawsuit that involves the County of Hawai'i and the Federal Water Pollution Control Act.*

**Response:** The Final EA for the project has been updated to include this information.

We appreciate your input and will include a copy of your letter along with this response letter in the Final EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uoklani Trust  
Erin Ishizaki, Mithun  
Keith Uemura, Park Engineering, Inc.

K:\DATA\LT\Makalapua PD 1875\Draft EA\Draft EA 2023\Response Letters\LUC.docx

**EXHIBIT 1.**



BEFORE THE LAND USE COMMISSION  
OF THE STATE OF HAWAII

In the Matter of the Petition of  
QUEEN LILI'UOKALANI TRUST

To Amend the Agricultural District Boundary into the Urban District for approximately 919.366 acres and to Amend the Conservation District Boundary into the Urban District for approximately 188.358 acres, at Keahuolū, Island, County and State of Hawai'i, Hawai'i Tax Map Key Nos. (3) 7-4-08: por. 2, por. 12

DOCKET NO. A89-646

ORDER GRANTING PETITIONER  
QUEEN LILI'UOKALANI TRUST'S  
MOTION FOR ORDER MODIFYING  
THE FINDINGS OF FACT,  
CONCLUSIONS OF LAW, AND  
DECISION AND ORDER FILED  
AUGUST 28, 1991; CERTIFICATE OF  
SERVICE

LAND USE COMMISSION  
STATE OF HAWAII  
2016 APR 21 P 12:23

ORDER GRANTING PETITIONER QUEEN LILI'UOKALANI TRUST'S MOTION FOR  
ORDER MODIFYING THE FINDINGS OF FACT, CONCLUSIONS OF LAW, AND  
DECISION AND ORDER FILED AUGUST 28, 1991

CERTIFICATE OF SERVICE

THIS IS TO CERTIFY THAT THIS IS A TRUE AND CORRECT  
COPY OF THE DOCUMENT ON FILE IN THE OFFICE OF THE  
STATE LAND USE COMMISSION, HONOLULU, HAWAII.

By  04/21/2016  
DANIEL E. ORODENKER Date  
Executive Officer

A89-646 Lili'uokalani Trust  
Motion to Modify



BEFORE THE LAND USE COMMISSION  
OF THE STATE OF HAWAII

In the Matter of the Petition of  
QUEEN LILI'UOKALANI TRUST

To Amend the Agricultural District Boundary into the Urban District for approximately 919.366 acres and to Amend the Conservation District Boundary into the Urban District for approximately 188.358 acres, at Keahuolū, Island, County and State of Hawai'i, Hawai'i Tax Map Key Nos. (3) 7-4-08: por. 2, por. 12

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AND

CERTIFICATE OF SERVICE

A89-646 Lili'uokalani Trust  
Motion to Modify



BEFORE THE LAND USE COMMISSION  
OF THE STATE OF HAWAII

In the Matter of the Petition of

QUEEN LILI'UOKALANI TRUST

To Amend the Agricultural District Boundary into the Urban District for approximately 919.366 acres and to Amend the Conservation District Boundary into the Urban District for approximately 188.358 acres, at Keahuolū, Island, County and State of Hawai'i, Hawai'i Tax Map Key Nos. (3) 7-4-08: por. 2, por. 12

DOCKET NO. A89-646

ORDER GRANTING PETITIONER  
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ORDER GRANTING PETITIONER QUEEN LILI'UOKALANI TRUST'S MOTION FOR  
ORDER MODIFYING THE FINDINGS OF FACT, CONCLUSIONS OF LAW, AND  
DECISION AND ORDER FILED AUGUST 28, 1991

On August 14, 2015, Petitioner QUEEN LILI'UOKALANI TRUST, a private operating foundation ("Petitioner") filed with the Land Use Commission of the State of Hawai'i ("Commission") a *Motion for Order Modifying the Findings of Fact, Conclusions of Law and Decision and Order filed August 28, 1991; Affidavit of LeeAnn Crabbe; Exhibits "1" "4"* in Docket No. A89-646 ("Motion to Modify"). The Motion to Modify requested the Commission issue an order modifying the Commission's *Findings of Fact, Conclusions of Law and Decision and Order filed August 28, 1991* ("1991 Decision and Order"), to remove 212.333 acres of

A89-646 Lili'uokalani Trust  
Motion to Modify

Agricultural Land makai of Queen Ka'ahumanu Highway ("Phase III") from the docket and the Petition Area that is subject to the 1991 Decision and Order. Phase III is further identified as Tax Map Key ("TMK") No. (3) 7-4-008:002 (por.) and is approximately shown on Exhibit "1" to the Motion to Modify.

The Commission, having duly considered the Motion to Modify, the arguments and representations by the parties, and the record in this docket finds and concludes the following:

**FINDINGS OF FACT**

1. Petitioner is a private operating foundation which provides benefits to orphans and destitute children of Hawaiian ancestry. On August 4, 1989, and by subsequent amendments on January 18, 31, and on February 5, 1991 (hereinafter collectively referred to as the "1991 Petition"), Petitioner petitioned the Commission to amend the land use district boundary to reclassify its land at Keahuolū, Island, County and State of Hawai'i, identified by Tax Map Key Nos. 7-4-08: por. 2 and 7-4-08: por. 12, to the State Urban District to permit the development of said lands.

2. The 1991 Petition identified three phases of development. Phase I and Phase II consisted of 545.391 acres of Agricultural and Conservation land mauka of Queen Ka'ahumanu Highway, previously identified as TMK No. 7-4-08: por. 12 in the 1991 Decision and Order, but now identified as TMK Nos. (3) 7-4-020:009, 010, 011, 012, 013, 014, 015, 022, and 028 (collectively "Phase I and II"). Phase III consisted of 212.333 acres of Agricultural land makai of Queen Ka'ahumanu Highway, identified as TMK No. 7-4-08: por. 2 ("Phase III").

3. Upon hearing and review of the testimony and evidence submitted in support of the 1991 Petition, the Commission entered its 1991 Decision and Order in which it reclassified Phase I and II to the Urban District. In the 1991 Decision and Order, the Commission also ordered that Phase III be "incrementally reclassified" pursuant to Hawaii Administrative Rules

A89-646 Lili'uokalani Trust  
Motion to Modify

("HAR") § 15-15-78 for redistricting from the Agricultural District to the Urban District pending a showing that Petitioner has made substantial completion of Phase I and II.

4. The 1991 Decision and Order specifically states:

IT IS HEREBY FURTHER ORDERED that the portion of the Property designated "Phase III" (212 acres) in Petitioner's Phasing Plan (Exhibit 18), representing a portion of the Property, consisting of approximately 212.333 acres in the Agricultural District, situated at Keahuolu, Island, County and State of Hawai'i, Hawai'i Tax Map Key No.: 7-4-08; por. 2, as approximately shown on Exhibit "A" attached hereto and incorporated herein by reference shall be and the same is hereby incrementally reclassified pursuant to Commission Rule 15-15-78, and that redistricting from the Agricultural District to the Urban District will be granted upon receipt of an application by Petitioner for redistricting of this second increment (Phase III) upon a prima facie showing that Petitioner has made substantial completion of first increment (Phase I and II).

5. On August 14, 2015, Petitioner filed its Motion to Modify the 1991 Decision and Order seeking to remove Phase III from the docket and the incremental districting for the subject Petition Area.

6. On August 24, 2015, OP filed a request for an extension to filing responses on Petitioner's Motion until September 14, 2015.

7. On August 25, 2015, the Commission sent a letter granting an extension to OP and all other parties.

8. On September 28, 2015, OP filed a request for another extension to filing responses to Petitioner's Motion until October 22, 2015.

9. On September 30, 2015, the Commission sent a letter granting the extension request to OP and all other parties.

10. On October 16, 2015, Petitioner filed with the Commission its *Supplemental Memorandum in Support of its Motion for Order Modifying the Findings of Fact, Conclusions of*

*Law, and Decision and Order filed August 28, 1991; Affidavit of LeeAnn Crabbe; Exhibit "5,"* which provided further background regarding the 1991 Petition and the Motion to Modify.

11. On October 22, 2015, OP filed a request for a further extension to filing responses to Petitioner's Motion until November 6, 2015.

12. On October 22, 2015, the Commission sent a letter granting the extension request to OP and all other parties.

13. On November 6, 2015, the State Office of Planning ("OP") filed its *Response to Petitioner's Motion for Order Modifying the Findings of Fact, Conclusions of Law, and Decision and Order filed August 28, 1001; Office of Planning Exhibit I*, requesting additional information and reserving the right to offer further comments if additional information is submitted.

14. On November 6, 2015, the County of Hawai'i, Department of Planning ("County") sent an e-mail request for an extension on filing comments on Petitioner's Motion.

15. On November 20, 2015, the Commission sent a letter to Petitioner requesting additional information to support its motion and sent a letter granting the extension request for additional time to comment to the County and all other parties pending receipt of supplemental information from Petitioner.

16. On January 11, 2016, Petitioner filed its *Second Supplemental Memo in Support of its Motion for Order Modifying the Findings of Fact, Conclusions of Law, and Decision and Order filed Aug. 28, 1991; Affidavit of LeeAnn Crabbe; Exhibits "6" – "10,"* responding to the OP's Response and the Commission's letter.

17. On January 22, 2016, the Planning Department, County of Hawaii ("County") filed its *Response to Petitioner's First and Second Supplemental Memorandum in Support of its*

*Motion for Order Modifying the Findings of Fact, Conclusions of Law, and Decision and Order filed August 28, 1991; County Exhibits "1" – "3," supporting the Motion to Modify.*

18. On March 4, 2016, the OP filed its *Supplemental Response to Queen Liliuokalani Trust's Motion for Order Modifying The Findings of Fact, Conclusions of Law, and Decision and Order filed August 28, 1991; Exhibit 1*, supporting the Motion to Modify.

19. On March 10, 2016, the Commission mailed the meeting notice and agenda for its March 23-24, 2016, meeting in Kona, Hawai'i to all parties, and the Statewide and Hawai'i County mailing lists.

20. On March 11, 2016, Petitioner filed its *Third Supplemental Memo in Support of its Mtn. for Order Modifying the Findings of Fact, Conclusions of Law, and Decision and Order filed Aug. 28, 1991; Affidavit of LeeAnn Crabbe; Exhibits "11" "12,"* which made a technical correction to the acreage information provided in Petitioner's earlier filings.

21. On March 21, 2016, the Commission received correspondence from Greater Kona Community Council ("Intervener") representative, Mark Van Pernis, advising that he no longer represented the Intervener which was involved in the original district boundary amendment proceedings and would not be appearing. Additional background checking indicates that the Greater Kona Community Council disbanded in 1994.

22. On March 22, 2016, OP filed an update and revision to OP Exhibit 1 (State Department of Transportation letter) in Supplemental Response of March 4, 2016.

23. The Commission received no formal requests to intervene in the Motion to Modify proceedings.

24. On March 23 and 24, 2016, the Commission met in Kailua-Kona, Hawai'i and considered Petitioner's Motion to Modify. Benjamin A. Kudo, Esq., Clara Park, Esq., and

LeeAnn Crabbe appeared on behalf of Petitioner; Bryan Yee, Esq. and Rodney Funakoshi appeared on behalf of OP; and, Amy Self, Esq., Daryn Arai and Duane Kanuha appeared on behalf of the County.

25. At the meeting, the Commission provided an opportunity for public testimony. The Commission heard public testimony from Ken Melrose in support, and Kirsten Kahaloa representing the Kona Chamber of Commerce also in support.

26. At the meeting on March 23, 2016, the Petitioner introduced Petitioner's Exhibits 1 to 12 and filed two new Petitioner's Exhibits 13 and 14. OP introduced OP Exhibits 1, Supplemental Exhibit 1 Department of Transportation ("DOT") letter, and an updated supplement to the DOT letter. The County introduced County Exhibits 1 to 3. There were no objections by any of the parties. The Chair admitted all parties' exhibits into the record. On March 24, 2016, the Petitioner introduced Petitioner's Exhibit 15 Resume and Qualifications for Tim Cornwell (replacement testifier for Richard Gollis) and a copy of Findings of Fact, Conclusions of Law, and Decision and Order for A79-470 Trustees of the Lili'uokalani Trust (by request of Commissioner Scheuer for Commission review).

27. LeeAnn Crabbe, Vice President for Petitioner, and Tim Cornwell, of The Concord Group, testified on Petitioner's behalf and addressed questions by the Commissioners. Mr. Cornwell was qualified as an expert witness in market feasibility analysis. Ms. Crabbe testified that QLT would not develop the remainder of Phase III lands before getting Commission approval of a petition for district boundary amendment; would not develop "gentlemen farms" in Phase III; and would not sequentially redistrict additional portions of Phase III in less than 15 acre increments, with the exception of the parcel to be included in the Makalapua Project District ("MPD").

28. Petitioner has completed the backbone infrastructure improvements required under the 1991 Decision and Order, as well as some development of Phases I and II and the conditions applicable to Phases I and II. However, Petitioner has not been able to substantially complete Phases I and II as originally planned in the 1991 Petition.

29. The downward market trends and recessions that occurred between 1990 and 2015 were unanticipated and affected the development demand for the 1991 Petition's original planned uses.

30. In addition, Petitioner discovered that the severe slopes of the lands in the Phase I and II parcels were better suited for smaller footprint uses.

31. Under the 1991 Decision and Order, Phase III remains subject to incremental districting from the Agricultural District to the Urban District because the 1991 Decision and Order requires the completion of Phases I and II before Phase III can be reclassified.

32. Petitioner has revised its development strategy for its Keahuolū lands, including Phase III, to better respond to community and market needs and to correspond with the Kona Community Development Plan ("Kona CDP"). Petitioner provided a conceptual overview of the two projects that it plans to develop: the MPD development, and the Keahuolū Land Plan development.

33. Petitioner filed the Motion to Modify to release the Phase III lands from incremental districting so that the Phase III lands can be incorporated into Petitioner's revised development strategy.

34. After Phase III is released from incremental districting, Petitioner will first seek reclassification of a less than 15-acre portion of Phase III through the County of Hawai'i, to be included in the MPD development. Petitioner will later seek reclassification of the remainder of

Phase III through a new petition for district boundary amendment to be filed with the Commission.

35. The release of Phase III lands for inclusion in the MPD development is critical because these lands are necessary to attract the types of tenants needed to support a regional commercial center as envisioned in the Kona CDP, and to generate the revenue needed to support the larger-scale Keahuolū Land Plan. The MPD development represents an immediate opportunity with significant retail and hotel interest, and Petitioner is already in active discussions regarding the MPD development.

36. The County stated its support of the Motion to Modify and addressed questions by the Commissioners. The County agreed that stagnation has occurred on commercial development within Petitioner's Phase I and II, with growth in recent years concentrated on lands situated makai of the Queen Ka'ahumanu Highway and immediately adjacent to the south of Phase III. The County believes that Petitioner's MPD development concept, which calls for the inclusion of a portion of the Phase III lands, will be a step towards establishing a Regional Center Transit Oriented Development as called for in the Kona CDP.

37. The OP stated its support of the Motion to Modify and addressed questions by the Commissioners. The OP requested that Petitioner provide OP with one hard copy and one electronic copy of its application for district boundary amendment with the County of Hawai'i within 24 hours of filing. The OP also recommended that Petitioner and the County consult with the State Department of Transportation, Department of Education, Department of Defense, Department of Land and Natural Resources, and Department of Health before the reclassification of the less than 15-acre area.

38. Following discussion by the Commissioners, a motion was made and seconded to grant the Motion to Modify. There being a vote tally of 7 ayes, 0 nays, and 1 absent, the motion carried.

**CONCLUSIONS OF LAW**

1. Any conclusion of law herein improperly designated as a finding of fact shall be deemed or construed as a construction of law; any finding of fact herein improperly designated as a conclusion of law shall be deemed or construed as a finding of fact.

2. HAR § 15-15-94 states:

(a) If a petitioner, pursuant to this subsection, desires to have a . . . modification of the commission's order, the petitioner shall file a motion in accordance with section 15-15-70 and serve a copy on all parties to the boundary amendment proceeding in which the condition was imposed or in which the order was issued, and to any person that may have a property interest in the subject property as recorded in the county's real property tax records at the time that the motion is filed.

(b) For good cause shown, the commission may act to . . . modify the commission's order.

(c) Any . . . modifications to the commission's order shall follow the procedures set forth in subchapter 11.

3. Under HAR §15-15-94(b), Petitioner has presented the Commission with good cause to modify the 1991 Decision and Order to remove Phase III from the docket and the incremental districting for the subject Petition Area.

**ORDER**

Having duly considered Petitioner's Motion to Modify, the oral and written arguments presented by the parties, the records and files herein, and a motion having been made at a hearing conducted on March 23 and 24, 2016, at Kailua-Kona, Hawai'i, and the motion having received

the affirmative votes required by HAR § 15-15-13, and there being good cause for the motion, the Commission ORDERS as follows:

1. The Motion to Modify filed by Petitioner is hereby GRANTED.

2. Within 24 hours of filing an application for district boundary amendment of a portion of Phase III with the County of Hawai'i, Petitioner shall provide OP with one hard copy and one electronic copy of its application.

3. Petitioner comply with State DOT recommendations:

a. Road A, a proposed road connecting the development to Queen Ka'ahumanu Highway between Hale Maka'i Street and Makala Boulevard, shall be configured as a right-turn in and right-turn out (RIRO) for both highway approaches;

b. The conversion of the Hale Maka'i Street intersection with Queen Ka'ahumanu Highway to right-turn in and right-turn out, and the relocation of the traffic signal from this intersection to the proposed Manawalea Boulevard intersection with Queen Ka'ahumanu Highway is under discussion and will be analyzed further; and,

c. Prepare and submit a Traffic Impact Analysis Report ("TIAR") to DOT for review and acceptance prior to submittal of the application for district boundary amendment with the County of Hawai'i. The TIAR shall include a discussion and calculation of the new QLT development's fair-share contribution for regional roadway improvements and may propose specific improvements that would satisfy the project's fair-share contribution.

4. Petitioner and the County shall consult with the State Department of Transportation, Department of Education, Department of Defense, Department of Land and Natural Resources, and Department of Health before the reclassification of a portion of Phase III by the County.

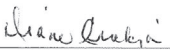


**I. ADOPTION OF ORDER**

This ORDER shall take effect upon the date this ORDER is certified and filed by this Commission.

Done at Kahului, Maui, this 21st day of April, 2016, per motion on March 24, 2016.

APPROVED AS TO FORM

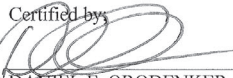
  
Deputy Attorney General

LAND USE COMMISSION  
STATE OF HAWAII

By   
EDMUND ACZON  
Chairperson and Commissioner

Filed and effective on:

04/21/2016

Certified by:  
  
DANIEL E. ORODENKER  
Executive Officer

A89-646 Lili'uokalani Trust  
Motion to Modify



BEFORE THE LAND USE COMMISSION  
OF THE STATE OF HAWAII

In the Matter of the Petition of  
QUEEN LILI'UOKALANI TRUST  
To Amend the Agricultural District Boundary into the Urban District for approximately 919.366 acres and to Amend the Conservation District Boundary into the Urban District for approximately 188.358 acres, at Keahuolu, Island, County and State of Hawai'i, Hawai'i Tax Map Key Nos. (3) 7-4-08: por. 2, por. 12

DOCKET NO. A89-646  
ORDER GRANTING PETITIONER QUEEN LILI'UOKALANI TRUST'S MOTION FOR ORDER MODIFYING THE FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION AND ORDER FILED AUGUST 28, 1991; CERTIFICATE OF SERVICE

**CERTIFICATE OF SERVICE**

I hereby certify that a copy of the ORDER GRANTING PETITIONER QUEEN LILI'UOKALANI TRUST'S MOTION FOR ORDER MODIFYING THE FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION AND ORDER FILED AUGUST 28, 1991 was served upon the following by either hand delivery or deposit the same in the U.S. Postal Service by regular or certified mail as noted:

CERTIFIED MAIL: BENJAMIN A. KUDO, Esq.  
CONNIE C. CHOW, Esq.  
Ashford & Wriston LLP  
999 Bishop Street, Suite 1400  
Honolulu, Hawai'i 96813  
Attorney for Movant, Queen Lili'uokalani Trust

DEL.: LEO R. ASUNCION, Director  
State Office of Planning  
P. O. Box 2359  
Honolulu, Hawai'i 96804-2359

A89-646 Lili'uokalani Trust  
Motion to Modify

REGULAR MAIL: BRYAN C. YEE, Esq.  
DEBORAH DAY EMERSON  
Deputy Attorney General  
425 Queen Street  
Honolulu, Hawai'i 96813  
Attorney for State Office of Planning

REGULAR MAIL: DUANE KANUHA, Planning Director  
Hawai'i Planning Department  
County of Hawai'i  
101 Pauahi Street, Room 325  
Hilo, Hawai'i 96720

REGULAR MAIL: AMY SELF, Esq.  
Office of the Corporation Counsel  
County of Hawai'i  
101 Aupuni Street, Room 325  
Hilo, Hawai'i 96720  
Attorney for the County of Hawai'i Department of Planning

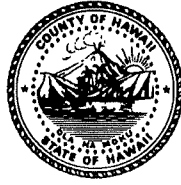
Dated: Honolulu, Hawai'i, 04/21/2016



DANIEL E. ORODENKER  
Executive Officer

Mitchell D. Roth  
Mayor

Deanna S. Sako  
Managing Director



Ramzi I. Mansour  
Director

Brenda Iokepa-Moses  
Deputy Director

# County of Hawai'i

## DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

345 Kekūanāo'a Street, Suite 41 · Hilo, Hawai'i 96720 · cohdem@hawaiiicounty.gov

Ph: (808) 961-8083 · Fax: (808) 961-8086

April 16, 2024

Yukino Uchiyama, Manager  
Munekiyo Hiraga  
planning@munekiyohiraga.com

Zendo Kern, Planning Director  
planning@hawaiiicounty.gov

**SUBJECT:** Draft Environmental Assessment for the Proposed Makalapua Project District  
TMK (3) 7-4-008:002 (por.), (3) 7-4-010:009 and 010, (3) 7-4-025:01, 002, 003,  
005, 015, and 021, Kailua-Kona, Hawai'i, Hawai'i.

The Department of Environmental Management appreciates the opportunity to provide comment on the above-referenced matter.

The Solid Waste Division affirms that its early consultation comments dated September 20, 2023, are still applicable.

Regarding Volume 1, Section II-C-6(a), Solid Waste Disposal, Solid Waste Division brings attention to some outdated standard language that needs to be updated:

### **"6. Solid Waste Disposal**

#### **a. Existing Conditions**

The County's Department of Environmental Management (DEM), Solid Waste Division operates and maintains all solid waste collection and disposal facilities in the County of Hawai'i. This includes [~~two (2) landfills~~] one active landfill, 21 transfer stations, and island-wide hauling operations in accordance with local, State, and Federal regulations.

The West Hawai'i Sanitary Landfill (WHSL), located in South Kohala, serves [~~West Hawai'i~~] the entire Island of Hawai'i. The WHSL has [~~permits for 23 cells with 10 being filled and one (1) being active~~] a permit for 23 cells with 13 being filled, one being active, and one in construction. The WHSL accepted approximately [~~12,000 tons per month in 2018. Current operation functions, as outlined in The County of Hawai'i Integrated Resources and Solid Waste Management Plan Update, estimated that the WHSL has 100 years of remaining life as of 2019~~]

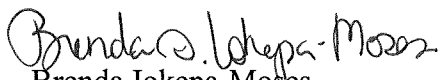
(Parametrix, 2019).] 17,000 tons per month in 2023 and its lifespan in 2024 is estimated to be less than 25 years.

Residential solid waste is accepted at any of the 21 solid waste transfer stations located on the island. In some areas, residents may hire a private collection company to pick-up their solid waste for disposal at WHSL or, if applicable, at the East Hawai'i Regional Sort Station in Hilo. The nearest transfer station to the Makalapua Project District is Kealakehe Transfer Station, Scrap Metal Yard, and Green waste Yard, located approximately one (1) mile to the north. The Transfer Station operates daily and accepts residential solid waste, scrap metal recycling, and green waste recycling.”

The Wastewater Division affirms that its early consultation comments dated September 20, 2023, are still applicable.

Again, thank you for the opportunity to provide comment.

Sincerely,

  
Brenda Iokepa-Moses  
Deputy Director

October 1, 2024

Brenda Iokepa-Moses, Deputy Director  
County of Hawai'i  
Department of Environmental Management  
345 Kekūanāo'a Street, Suite 41  
Hilo, Hawai'i 96720

**SUBJECT: Draft Environmental Assessment for the Proposed Makalapua Project District Project, Kailua-Kona, County of Hawai'i, Hawai'i**

Dear Ms. Iokepa-Moses

Thank you for your letter dated April 16, 2024 providing comments on the Draft Environmental Assessment (EA) for the Proposed Makalapua Project District Project. On behalf of the Lili'uokalani Trust (LT), we note your confirmation that Solid Waste Division and Wastewater Division early consultation comments are still applicable. We also thank you for providing your suggested revisions to the solid waste disposal section of the Draft EA to reflect the most recent solid waste disposal information for the County of Hawai'i. Those changes will be reflected in the Final EA.

We appreciate your input and will include a copy of your letter along with this response letter in the Final EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,

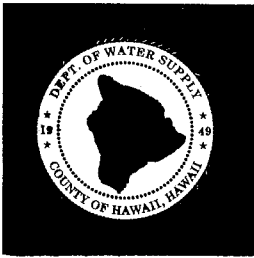


Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uoklani Trust

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**DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAI'I**

345 KEKŪANAŌ'A STREET, SUITE 20 • HILO, HAWAI'I 96720  
TELEPHONE (808) 961-8050 • FAX (808) 961-8657

March 28, 2024

**TO:** Mr. Zendo Kern, Director  
Planning Department

**FROM:** Keith K. Okamoto, Manager-Chief Engineer

**SUBJECT:** **Draft Environmental Assessment for Proposed Makalapua Project District  
Keahuolū, North Kona, Hawai'i  
Tax Map Key 7-4-008:002 (Portion), 7-4-010:009 and 010,  
7-4-025:001, 002, 003, 005, 015, and 021**

We have reviewed the subject Draft Environmental Assessment (DEA) and have the following comments.

The applicant shall update the Infrastructure Report to show the additional storage and transmission capacity in order to accommodate the additional demand of water from the source, from the Keahuolu Lands Water Resources Development Agreement, to this development. Also, please remove "Agreement" from the "Makalapua Business Center Water Commitment Agreement."

Water service will be subject to the terms of the agreement and upon completion and dedication of the required water system improvements.

For the Water Sizing Calculations, please provide justification for the water demand for a hotel unit. Please revise pipe material to ductile iron. Also, please provide verification that pipe velocities do not exceed the standards for the maximum day plus fire flow condition.

Should there be any questions, please contact Mr. Ryan Quitariano of our Water Resources and Planning Branch at (808) 961-8070, extension 256.

Sincerely yours,

Keith K. Okamoto, P.E.  
Manager-Chief Engineer

RQ:dfg

copy – Munekiyo Hiraga

October 1, 2024

Keith K. Okamoto, Manager-Chief Engineer  
County of Hawai'i  
Department of Water Supply  
345 Kekūanaō'a Street, Suite 20  
Hilo, Hawai'i 96720

**SUBJECT:** Draft Environmental Assessment for the Proposed Makalapua Project District Project; Kailua-Kona, County of Hawai'i, Hawai'i

Dear Mr. Okamoto:

Thank you for your letter dated March 28, 2024 providing comments on the Draft Environmental Assessment (EA) for the Proposed Makalapua Project District Project. On behalf of the Lili'uokalani Trust (LT), we offer the following information in response to the comments received:

**Comment No. 1:**

*The applicant shall update the Infrastructure Report to show the additional storage and transmission capacity in order to accommodate the additional demand of water from the source, from the Keahuolu Lands Water Resources Development Agreement, to this development. Also, please remove "Agreement" from the "Makalapua Business Center Water Commitment Agreement".*

**Response:** The Infrastructure Report prepared for the project will be updated to note that additional storage and transmission capacity has been provided in compliance with the Keahuolū Lands Water Resources Development Agreement.

As requested, the Final EA will be updated to remove "Agreement" from the "Makalapua Business Center Water Commitment Agreement" reference.

**Comment No. 2:**

*Water service will be subject to the terms of the agreement and upon completion and dedication of the required water system improvements.*

**Response:** LT acknowledges and understands this comment.

**Comment No. 3:**

*For the Water Sizing Calculations, please provide justification for the water demand for a hotel unit. Please revise pipe material to ductile iron. Also, please provide verification that pipe velocities do not exceed the standards for the maximum day plus fire flow condition.*

**Response:** Table 100-18 Domestic Consumption Guidelines from the County's Water System Standards does not include a demand for hotel use. As such, the civil engineer for the project used a demand of 100 gallons per day per hotel room based on the United States Environmental Protection Agency's Data Trends Water Use Tracking document dated October 2012 which states, "the median daily water use per hotel room over the period 2006-2012 was 102 gallons." This document is attached as **Exhibit 1**.

As requested, the pipe material will be revised to ductile iron. This change will be reflected in the updated Infrastructure Report included in the Final EA.

In addition, the civil engineer for the project has revised the pipe size on Ma'a Way north of Makala Boulevard from 8-inch to 12-inch to meet the required maximum 10 foot-per second velocity during max daily flow plus fire flow conditions. It is noted that this section of pipe is a dead-end leg for the interim condition and could possibly connect to a future waterline constructed with a future Kuakini Highway extension to the north at such time it is constructed. An attached revised Water CAD map and fire flow calculation table in **Exhibit 2** provides verification that pipe velocities within the project area meet the standards for the interim condition. This will also be included in the updated Infrastructure Report in the Final EA.

We appreciate your input and will include a copy of your letter along with this response letter in the Final EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de  
Attachments

cc: Bryan Esmeralda, Lili'uoklani Trust  
Keith Uemura, Park Engineering, Inc.

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**EXHIBIT 1.**

## Water Use Tracking

### Buildings Tracking Water Use in Portfolio Manager

53,306 Properties  
6.2 Billion ft<sup>2</sup>

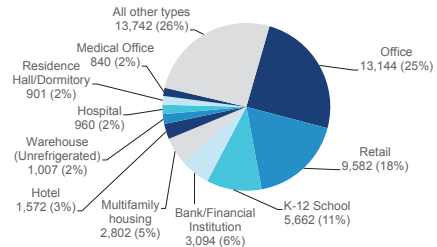
As of June 2012

Organizations across the country are measuring and tracking the water use of over 50,000 buildings using the U.S. Environmental Protection Agency's (EPA) ENERGY STAR Portfolio Manager. These buildings represent close to 20% of all buildings in Portfolio Manager. EPA has prepared the DataTrends series to examine trends in energy and water consumption in Portfolio Manager. This document presents the general trends seen in the water data. To learn more, visit [www.energystar.gov/DataTrends](http://www.energystar.gov/DataTrends).

### Who is tracking water use?

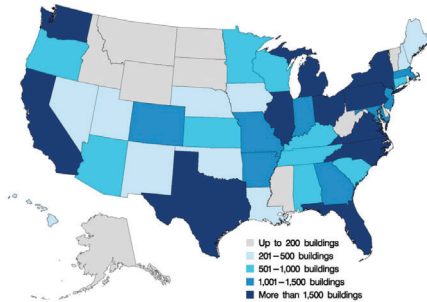
Many different types of organizations are tracking water consumption in a wide variety of buildings located in all 50 states. The most common types of buildings with water data are Office, Retail, and K-12 School, followed closely by Banks and Multifamily Housing. States and building types with the most energy benchmarking also tend to have the most water tracking.

### Water Use Tracking by Building Type

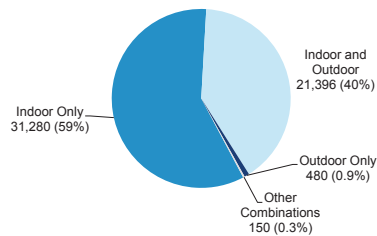


Building owners and operators have the option to classify water use in Portfolio Manager as Indoor, Outdoor, Other, or some combination of the three. If separate meters are present for indoor and outdoor water use, Portfolio Manager can track these independently and can also provide a total water use metric. Close to 60% of users are tracking indoor water use only, while just over 40% track a combination of indoor and outdoor use. Other combinations are rare. The remainder of this document focuses on trends in indoor water consumption.

### Water Use Tracking by State



### Category of Water Use Tracked

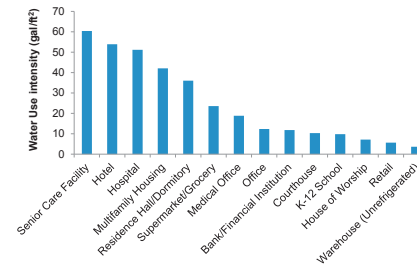


EPA's WaterSense program seeks to protect the future of our nation's water supply by offering people a simple way to use less water with water-efficient products, new homes, and services. WaterSense and ENERGY STAR are working together to bring water efficiency solutions to the commercial sector.

## How does indoor water use vary among buildings?

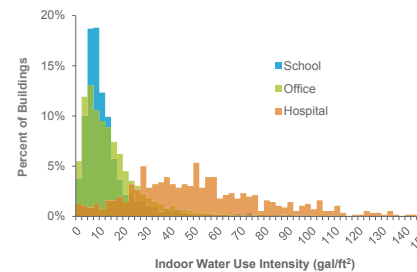
There is a wide variation in water use among buildings in Portfolio Manager. Total water use and water use intensity (WUI) in gallons per square foot vary greatly based on the type of building. As expected, the buildings in which people live as well as work, such as Senior Care, Hotels, Hospitals, Multifamily Housing, and Residence Halls have the highest WUI.

### Median Water Use Intensity



Each individual building type displays a range of WUI values. This variation may result from differences in business activity, climate, or equipment and operation. The following figure shows the full range of values observed for School, Office, and Hospital. The range in variation for Hospitals is quite large, while less variation is seen in Schools and Offices.

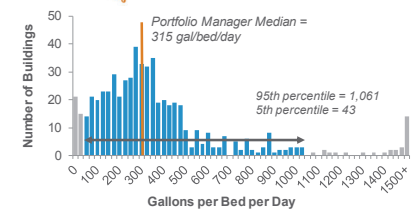
### Range of Water Use Intensity



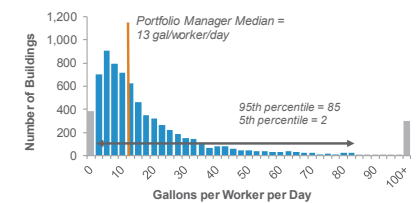
## How does indoor water use relate to business activity?

WUI offers an easy method of comparing water use in different types of buildings. However, when looking at the range within an individual type it is instructive to consider water relative to key measures of business activity. The following graphs explore the variation in indoor water use for Hospitals, Offices, and Hotels in the context of their main business activity. For example, the median Hospital uses 315 gallons of water per bed each day.

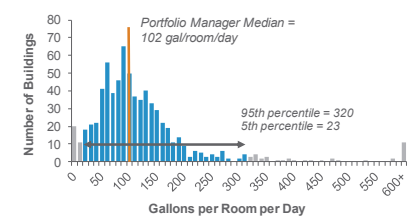
### Hospital Use Per Bed



### Office Use Per Worker



### Hotel Use Per Room



**Note:** Number and floor area of buildings tracking water use includes cumulative data through mid-year 2012. Water use and business activity includes buildings benchmarked between 2006 and 2012. The data is self reported and has been filtered to exclude outliers, incomplete records, and test facilities. Portfolio Manager is not a randomly selected sample and is not the basis of the ENERGY STAR score. To learn more, visit: [www.energystar.gov/DataTrends](http://www.energystar.gov/DataTrends).

**EXHIBIT 2.**

Water System Model



Makalapua Project District  
Waterline Sizing Calculations

Fire Flow							
Label	Satisfies Fire Flow Constraints?	Fire Flow (Needed) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
H-1	TRUE	2,000	2,000	2,001	93.8	5.5	P-10
H-2	TRUE	2,000	2,000	2,001	95.0	5.6	P-10
H-3	TRUE	2,000	2,000	2,001	101.3	5.6	P-10
H-4	TRUE	2,000	2,000	2,001	96.8	9.6	P-59
H-5	TRUE	2,000	2,000	2,001	91.6	7.2	P-59
H-6	TRUE	2,000	2,000	2,001	90.7	7.6	P-63
H-7	FALSE	2,000	2,000	1,557	97.3	10.0	P-67
H-8	FALSE	2,000	2,000	1,087	97.6	10.0	P-70
H-9	TRUE	2,000	2,000	2,001	92.8	5.7	P-10
H-10	TRUE	2,000	2,000	2,001	97.0	5.7	P-10
H-11	TRUE	2,000	2,000	2,001	94.4	5.7	P-10
H-12	TRUE	2,000	2,000	2,001	99.7	5.7	P-10
H-13	TRUE	2,000	2,000	2,001	100.2	5.7	P-10
H-14	TRUE	2,000	2,000	2,001	101.2	5.7	P-10
H-15	TRUE	2,000	2,000	2,001	103.1	5.8	P-10
H-16	FALSE	2,000	2,000	1,454	20.0	4.5	P-10
H-17	TRUE	2,000	2,000	2,001	103.6	5.7	P-10
H-18	TRUE	2,000	2,000	2,001	101.5	5.7	P-10
H-19	FALSE	2,000	2,000	1,092	75.6	10.0	P-167
H-20	FALSE	2,000	2,000	983	88.1	10.0	P-167
H-21	FALSE	2,000	2,000	1,167	60.3	10.0	P-167
H-22	FALSE	2,000	2,000	1,302	39.4	10.0	P-167
H-23	FALSE	2,000	2,000	1,420	20.0	9.4	P-167
H-24	FALSE	2,000	2,000	769	65.9	10.0	P-148
H-25	FALSE	2,000	2,000	1,440	24.1	10.0	P-14
H-26	FALSE	2,000	2,000	1,309	46.5	10.0	P-14
H-27	FALSE	2,000	2,000	1,192	60.4	10.0	P-14
H-28	FALSE	2,000	2,000	1,074	78.3	10.0	P-14
H-29	FALSE	2,000	2,000	1,100	92.5	10.0	P-13
H-30	FALSE	2,000	2,000	1,448	78.3	10.0	P-13
H-31	FALSE	2,000	2,000	1,508	71.2	10.0	P-153

Makalapua Project District  
Waterline Sizing Calculations

Fire Flow							
Label	Satisfies Fire Flow Constraints?	Fire Flow (Needed) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
H-32	FALSE	2,000	2,000	1,614	67.5	10.0	P-158
H-33	FALSE	2,000	2,000	1,348	82.0	10.0	P-158
H-34	FALSE	2,000	2,000	998	110.9	10.0	P-158
H-35	FALSE	2,000	2,000	1,439	83.9	10.0	P-9
H-36	FALSE	2,000	2,000	1,258	102.6	10.0	P-9
H-37	FALSE	2,000	2,000	1,747	103.3	10.0	P-11
H-38	FALSE	2,000	2,000	1,205	96.5	10.0	P-158
H-39	FALSE	2,000	2,000	1,646	72.2	10.0	P-9
H-40	TRUE	2,000	2,000	2,001	105.4	5.9	P-113
H-41	TRUE	2,000	2,000	2,001	105.3	5.9	P-113
H-42	TRUE	2,000	2,000	2,001	107.0	5.9	P-113
H-43	TRUE	2,000	2,000	2,001	117.0	5.7	P-10
H-44	TRUE	2,000	2,000	2,001	98.9	7.1	P-10
H-45	TRUE	2,000	2,000	2,001	98.1	8.0	P-192
H-46	TRUE	2,000	2,000	2,001	100.5	6.6	P-191
H-47	TRUE	2,000	2,000	2,001	102.1	8.3	P-189
H-48	TRUE	2,000	2,000	2,001	106.0	5.7	P-10
H-49	TRUE	2,000	2,000	2,001	115.5	5.7	P-10
H-50	TRUE	2,000	2,000	2,001	105.6	5.7	P-10
H-51	TRUE	2,000	2,000	2,001	100.1	8.1	P-117
H-52	TRUE	2,000	2,000	2,001	98.9	7.5	P-119
H-53	TRUE	2,000	2,000	2,001	99.9	5.7	P-10
H-54	TRUE	2,000	2,000	2,001	114.0	5.7	P-10
H-55	TRUE	2,000	2,000	2,001	105.6	5.7	P-10
J-1	TRUE	2,000	2,000	2,001	105.1	5.4	P-10
J-2	TRUE	2,000	2,004	2,005	106.7	5.6	P-10
J-3	TRUE	2,000	2,013	2,014	105.4	5.7	P-10
J-4	TRUE	2,000	2,000	2,001	102.4	5.7	P-10
J-5	TRUE	2,000	2,000	2,001	51.7	4.9	P-105
J-6	TRUE	2,000	2,000	2,001	99.1	5.7	P-10
J-7	TRUE	2,000	2,000	2,001	51.0	5.0	P-105

Scenario: Maximum Daily + Fire Flow

Makalapua Project District  
Waterline Sizing Calculations

Fire Flow							
Label	Satisfies Fire Flow Constraints?	Fire Flow (Needed) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-8	TRUE	2,000	2,008	2,009	117.3	4.8	P-22
J-9	TRUE	2,000	2,000	2,001	117.2	4.7	P-22
J-10	FALSE	2,000	2,000	1,480	20.9	4.5	P-10
J-11	TRUE	2,000	2,000	2,001	73.3	4.9	P-105
J-12	TRUE	2,000	2,000	2,001	112.8	5.7	P-10
J-13	TRUE	2,000	2,031	2,032	103.9	7.6	P-10
J-14	TRUE	2,000	2,011	2,012	116.1	4.8	P-138
J-15	FALSE	2,000	2,004	1,711	68.9	10.0	P-13
J-16	FALSE	2,000	2,004	1,811	78.0	10.0	P-67
J-17	FALSE	2,000	2,000	881	57.9	10.0	P-18
J-18	FALSE	2,000	2,002	1,477	23.1	10.0	P-15
J-19	FALSE	2,000	2,102	871	66.4	10.0	P-148
J-20	FALSE	2,000	2,000	1,802	77.9	10.0	P-67
J-21	FALSE	2,000	2,000	1,685	90.3	10.0	P-67
J-22	FALSE	2,000	2,006	1,425	20.0	9.9	P-167
J-23	TRUE	2,000	2,222	2,223	111.1	4.8	P-138
J-24	TRUE	2,000	2,000	2,001	99.1	5.1	P-22
J-25	TRUE	2,000	2,174	2,175	77.2	5.1	P-22
J-26	TRUE	2,000	2,169	2,170	126.2	4.6	P-22
J-27	TRUE	2,000	2,148	2,149	128.4	4.4	P-22
J-28	TRUE	2,000	2,104	2,105	129.2	4.3	P-22
J-29	TRUE	2,000	2,000	2,001	129.2	4.3	P-22
J-30	TRUE	2,000	2,159	2,160	89.2	4.3	P-22
J-31	TRUE	2,000	2,000	2,001	130.5	4.1	P-22
J-32	TRUE	2,000	2,137	2,138	129.7	4.1	P-22
J-33	TRUE	2,000	2,020	2,021	130.5	4.0	P-22
J-34	TRUE	2,000.00	2,000.00	2,001.00	130.8	4	P-22
J-35	TRUE	2,000.00	2,000.00	2,001.00	131.2	3.94	P-22
J-36	TRUE	2,000.00	2,000.00	2,001.00	127.2	3.96	P-22
J-37	TRUE	2,000.00	2,000.90	2,001.90	64.3	3.96	P-22
J-38	TRUE	2,000.00	2,445.05	2,446.05	82.7	3.99	P-22

Scenario: Maximum Daily + Fire Flow

Makalapua Project District  
Waterline Sizing Calculations

Fire Flow							
Label	Satisfies Fire Flow Constraints?	Fire Flow (Needed) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-39	TRUE	2,000.00	2,000.00	2,001.00	112.3	4.05	P-22
J-40	TRUE	2,000.00	2,000.00	2,001.00	115.6	4.05	P-22
J-41	TRUE	2,000.00	2,000.00	2,001.00	125.8	4.36	P-22
J-42	TRUE	2,000.00	2,246.30	2,247.30	106.6	4.13	P-22
J-43	TRUE	2,000.00	2,000.00	2,001.00	124.3	4.02	P-22
J-44	TRUE	2,000.00	2,000.00	2,001.00	126.7	3.96	P-22
J-45	TRUE	2,000.00	2,000.00	2,001.00	117.8	4.05	P-22
J-46	TRUE	2,000.00	2,000.00	2,001.00	105.9	5.49	P-10
J-47	TRUE	2,000.00	2,000.00	2,001.00	107.3	5.56	P-10
J-48	TRUE	2,000.00	2,000.00	2,001.00	107.6	5.61	P-10
J-49	TRUE	2,000.00	2,000.00	2,001.00	103.1	9.59	P-59
J-50	TRUE	2,000.00	2,000.00	2,001.00	99.2	7.17	P-59
J-51	TRUE	2,000.00	2,000.00	2,001.00	98.3	7.6	P-63
J-52	FALSE	2,000.00	2,000.00	1,556.54	100.7	10	P-67
J-53	FALSE	2,000.00	2,000.00	1,086.79	101	10	P-70
J-54	TRUE	2,000.00	2,000.00	2,001.00	100.8	5.71	P-10
J-55	TRUE	2,000.00	2,000.00	2,001.00	102.4	5.7	P-10
J-56	TRUE	2,000.00	2,001.86	2,002.86	103.7	5.7	P-10
J-57	TRUE	2,000.00	2,012.68	2,013.68	105.6	5.72	P-10
J-58	TRUE	2,000.00	2,029.84	2,030.84	105.2	5.74	P-10
J-59	TRUE	2,000.00	2,017.16	2,018.16	107.2	5.77	P-10
J-76	TRUE	2,000.00	2,005.00	2,006.00	109.2	5.85	P-113
J-77	TRUE	2,000.00	2,000.00	2,001.00	112	5.7	P-10
J-78	TRUE	2,000.00	2,000.00	2,001.00	109.6	5.69	P-10
J-79	TRUE	2,000.00	2,015.18	2,016.18	108.8	5.68	P-10
J-80	TRUE	2,000.00	2,002.47	2,003.47	107.4	5.67	P-10
J-81	TRUE	2,000.00	2,027.47	2,028.47	110.6	5.85	P-113
J-82	TRUE	2,000.00	2,028.04	2,029.04	102.3	7.51	P-119
J-83	TRUE	2,000.00	2,033.08	2,034.08	111.4	5.69	P-10
J-84	TRUE	2,000.00	2,000.00	2,001.00	105.2	5.68	P-125
J-85	TRUE	2,000.00	2,004.48	2,005.48	106.6	5.65	P-10

Scenario: Maximum Daily + Fire Flow

Makalapua Project District  
Waterline Sizing Calculations

Fire Flow							
Label	Satisfies Fire Flow Constraints?	Fire Flow (Needed) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-86	TRUE	2,000.00	2,000.00	2,001.00	111.2	5.7	P-10
J-87	TRUE	2,000.00	2,000.00	2,001.00	111.6	5.7	P-10
J-88	TRUE	2,000.00	2,000.00	2,001.00	109.5	5.7	P-10
J-89	FALSE	2,000.00	2,000.00	1,735.12	98.3	10	P-135
J-90	TRUE	2,000.00	2,000.00	2,001.00	115	5.06	P-137
J-91	TRUE	2,000.00	2,023.63	2,024.63	101	5.7	P-10
J-92	FALSE	2,000.00	2,010.75	993.48	89.8	10	P-167
J-93	FALSE	2,000.00	2,007.14	1,098.38	76.3	10	P-167
J-94	FALSE	2,000.00	2,006.88	1,173.81	62.8	10	P-167
J-95	FALSE	2,000.00	2,010.21	1,312.23	40.5	10	P-167
J-96	FALSE	2,000.00	2,005.01	1,477.66	20	9.73	P-167
J-97	FALSE	2,000.00	2,010.61	779.20	62.4	10	P-148
J-98	FALSE	2,000.00	2,009.22	1,449.45	28	10	P-14
J-99	FALSE	2,000.00	2,019.85	1,328.69	47.8	10	P-14
J-100	FALSE	2,000.00	2,010.63	1,202.59	63.1	10	P-14
J-101	FALSE	2,000.00	2,000.00	1,073.94	79	10	P-14
J-102	FALSE	2,000.00	2,010.49	1,110.73	94.7	10	P-13
J-103	FALSE	2,000.00	2,014.66	1,462.52	79.6	10	P-13
J-104	FALSE	2,000.00	2,016.88	1,524.42	75.3	10	P-153
J-105	FALSE	2,000.00	2,022.89	1,636.97	69.9	10	P-158
J-106	FALSE	2,000.00	2,013.51	1,361.66	86	10	P-158
J-107	FALSE	2,000.00	2,014.81	1,012.78	111.8	10	P-158
J-108	FALSE	2,000.00	2,014.43	1,494.69	84.5	10	P-9
J-109	FALSE	2,000.00	2,008.44	55.08	83.4	10	P-175
J-110	FALSE	2,000.00	2,013.95	1,453.08	87.7	10	P-9
J-111	FALSE	2,000.00	2,003.79	1,261.63	103.2	10	P-9
J-112	FALSE	2,000.00	2,010.85	1,757.51	105.9	10	P-11
J-113	FALSE	2,000.00	2,011.89	1,217.14	97	10	P-158
J-114	FALSE	2,000.00	2,012.39	1,658.67	73.3	10	P-9
J-115	FALSE	2,000.00	2,000.00	881.28	86.9	10	P-181
J-116	TRUE	2,000.00	2,027.47	2,028.47	108.6	5.85	P-113

Scenario: Maximum Daily + Fire Flow

Makalapua Project District  
Waterline Sizing Calculations

Fire Flow							
Label	Satisfies Fire Flow Constraints?	Fire Flow (Needed) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-117	TRUE	2,000.00	2,000.00	2,001.00	108.8	5.85	P-113
J-118	TRUE	2,000.00	2,000.00	2,001.00	109.8	5.7	P-10
J-119	TRUE	2,000.00	2,012.99	2,013.99	107.6	5.78	P-10
J-120	TRUE	2,000.00	2,029.58	2,030.58	102.1	8.09	P-117
J-121	TRUE	2,000.00	2,016.85	2,017.86	103.5	6.58	P-191
J-122	TRUE	2,000.00	2,013.41	2,014.41	106.5	8.25	P-189
J-123	TRUE	2,000.00	2,009.16	2,010.16	110.4	5.7	P-10
J-124	TRUE	2,000.00	2,014.37	2,015.38	111.3	5.69	P-10
J-125	TRUE	2,000.00	2,000.00	2,001.00	109.2	5.68	P-10
J-126	TRUE	2,000.00	2,011.21	2,012.21	103.1	8	P-192
J-127	TRUE	2,000.00	2,011.21	2,012.21	102.8	7.13	P-10
J-128	TRUE	2,000.00	2,000.00	2,001.00	110.6	5.7	P-10

Scenario: Maximum Daily + Fire Flow

----- Forwarded message -----

From: **Aaron Stene** <[aaron.m.stene@gmail.com](mailto:aaron.m.stene@gmail.com)>

Date: Tue, Mar 19, 2024 at 5:08 PM

Subject: Letter To The Editor Submittal - Makalapua Project District

To: David Bock <[dbock@hawaiitribune-herald.com](mailto:dbock@hawaiitribune-herald.com)>, <[letters@hawaiitribune-herald.com](mailto:letters@hawaiitribune-herald.com)>

Queen Liliuokalani Trust's plans for the Makalapua project district need to be scrutinized closely.

We need more housing, but more of the affordable type - not high end housing. We don't need more commercial/

retail/accommodation space, You can see there is a glut that remains empty over several years.

Crossroads,

Niumalu Marketplace, Makalapua Center, Kona International Market come to mind,

QLT needs to redevelop the latter two complexes before proceeding with this new development. I respect the

need to maintain a revenue stream that will help Native Hawaiian children, but that can be accomplished by r

edeveloping the Kona International Market and Makalapua Center, which largely sit empty and not generating

revenue for the trust. Big Kmart alone was paying 2 million dollars in yearly lease rent.

QLT needs to reevaluate their plans and organically redevelop

the areas I mentioned before proceeding with this massive project makai of Kona Commons.

Aaron Stene

Kailua-Kona

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**Aaron Stene**

[aaron.m.stene@gmail.com](mailto:aaron.m.stene@gmail.com)

**808-333-0996 (Cellular)**

**808-325-2041 (Landline)**



**From:** Aaron Stene <[aaron.m.stene@gmail.com](mailto:aaron.m.stene@gmail.com)>

**Sent:** Thursday, March 21, 2024 9:24 AM

**To:** General eMail <[planning@munekiyohiraga.com](mailto:planning@munekiyohiraga.com)>; [besmeralda@onipaa.org](mailto:besmeralda@onipaa.org); Planning Internet Mail <[planning@hawaiiicounty.gov](mailto:planning@hawaiiicounty.gov)>; Kern, Zendo <[Zendo.kern@hawaiiicounty.gov](mailto:Zendo.kern@hawaiiicounty.gov)>; Darrow, Jeff <[Jeff.Darrow@hawaiiicounty.gov](mailto:Jeff.Darrow@hawaiiicounty.gov)>

**Subject:** Fwd: QLT needs to change its plan

<https://www.westhawaiitoday.com/2024/03/21/opinion/letters-to-the-editor-for-thursday-march-21-2024/>

Trust needs to change its plan

Queen Lili'uokalani Trust's plans for the Makalapua Project District (Tribune-Herald, March 19) need to be scrutinized closely.

We need more housing, but more of the affordable type — not high-end housing. We don't need more commercial/retail/accommodation space. You can see there is a glut that remains empty over several years.

Crossroads, Niumalu Marketplace, Makalapua Center, Kona International Market come to mind. QLT needs to redevelop the latter two complexes before proceeding with this new development.

I respect the need to maintain a revenue stream that will help Native Hawaiian children, but that can be accomplished by redeveloping the Kona International Market and Makalapua Center, which largely sit empty and not generating revenue for the trust. Kmart alone was paying \$2 million in yearly lease rent.

QLT needs to reevaluate their plans and organically redevelop the areas I mentioned before proceeding with this massive project makai of Kona Commons.

Aaron Stene

Kailua-Kona

--

**Aaron Stene**

[aaron.m.stene@gmail.com](mailto:aaron.m.stene@gmail.com)

**808-333-0996 (Cellular)**

**808-325-2041 (Landline)**

October 1, 2024

**Via email:** [aaron.m.stene@gmail.com](mailto:aaron.m.stene@gmail.com)

Aaron Stene  
Kailua-Kona

**SUBJECT:** Draft Environmental Assessment for the Proposed Makalapua Project District Project; Kailua-Kona, County of Hawai'i, Hawai'i

Dear Mr. Stene:

Thank you for your emails dated March 19, 2024 and March 21, 2024 providing comments on the Draft Environmental Assessment (EA) for the Proposed Makalapua Project District (MPD) Project. On behalf of the Lili'uokalani Trust (LT), we again thank you for meeting with the project team on March 22, 2024 to discuss your concerns regarding this project. In addition, we offer the following information in response to the comments received:

**Comment No. 1:**

*Queen Lili'uokalani Trust's plans for the Makalapua Project District (Tribune-Herald, March 19) need to be scrutinized closely. We need more housing, but more of the affordable type - not high end housing.*

**Response:** The proposed residential units are targeted for Hawai'i Island residents already living or working in Kona. They are not intended to be high-end products marketed to luxury buyers.

**Comment No. 2:**

*We don't need more commercial/retail/accommodation space, You can see there is a glut that remains empty over several years. Crossroads, Niumalu Marketplace, Makalapua Center, Kona International Market come to mind,*

*QLT needs to redevelop the latter two complexes before proceeding with this new development. I respect the need to maintain a revenue stream that will help Native Hawaiian children, but that can be accomplished by redeveloping the Kona International Market and Makalapua Center, which largely sit empty and not generating revenue for the trust. Big Kmart alone was paying 2 million dollars in yearly lease rent.*

*QLT needs to reevaluate their plans and organically redevelop the areas I mentioned before proceeding with this massive project makai of Kona Commons.*

**Response:** The proposed MPD is intended to present an opportunity to provide a mix of residential, commercial, and open space amenities in an area adjacent to existing activated commercial and recreational uses, and that is currently served by existing infrastructure. The proposed uses, including the amount of proposed commercial square footage, are supported by commercial and residential market studies that were conducted for the project. The updated development program for the MPD that was presented in the Draft EA represents an updated concept that reflects market changes following the COVID-19 pandemic and a reassessment of goals and priorities for the area. Compared to the previous 2019 version of the MPD plan, this current plan includes a reduced commercial component and an increased number of residential uses.

Furthermore, it is noted that although LT does not currently have development plans for its other lands and properties in Kona including the Makalapua Shopping Center and Kona International Market, LT plans to undertake comprehensive master planning for the area in the near future. LT believes that the development of MPD would bring housing opportunities and economic activities to Kona that is needed to spur development of other areas.

We appreciate your input and will include a copy of your emails along with this response letter in the Final EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uoklani Trust

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**DeVera, Ashley**

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**From:** cindy Freitas <makainanqi@gmail.com>  
**Sent:** Sunday, April 7, 2024 10:37 AM  
**To:** Planning Internet Mail  
**Subject:** Draft EA comment Period for "Makalapua Project District"  
**Attachments:** comment.docx

April 7, 2024

Cindy Freitas  
makainanqi@gmail.com

Consultant  
Munekiyo Hiraga  
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County of Hawaii  
Planning Department  
Zendo Kern  
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Lili'uokalani Trust  
Bryan Esmeralda  
besmeralda@onipaa.org

Comments via email  
planning@hawaiicounty.gov

RE: Makalapua Project District: Comment Period due April 8, 2024

Aloha,

My name is Cindy Freitas and I'm a descended of the indigenous inhabitants of Hawai'i prior to 1778 and born and raised in Hawai'i.

I am also a Practitioner who continue to practice the Cultural Traditional Customary Practices that was instill in me by my grandparents at a young age from mauka (MOUNTAIN TO SEA) to makai in many areas.

Makalapua Project District (MPD) which consist of TMK: NOS. (3)7-4-008;002 (por.), (3)7-4-010:009 and 010, (3)7-4-025:001, 002, 003, 005, 015, and 021

MPD should not be a EA rather it should be EIS (**Environment Impact Statement**) for the following reasons:

### **HISTORICAL PROPERTY'S PRE-CONTACT AND HISTORICAL**

Site 50-10-27-13260 A Modified Sink Water Catchment c, d Preservation Urban Phase III AIS  
Site 50-10-27-13260 B Modified Sink Water Catchment c, d Preservation Urban Phse III AIS  
Site 50-10-27-13260 C Modified Sink Water Catchment c, d Preservation Urban Phase III AIS  
Site 50-10-27-13261 Enclosure Ceremonial d, e Preservation Urban Phase III AIS  
Site 50-10-27-18502 Modified Depression Habitation d No Further Work Kona Commons SAIS  
Site 50-10-27-18508 Waield Overhang Habitation d No Further Work Kona Commons SAIS  
Site 50-10-27-18509 A Stone Mound Agriculture d No Further Work Kona Commons SAIS  
Site 50-10-27-18509 B Filled Depression None No Further Work Kona Commons SAIS  
Site 50-10-27-18509 C Stone Mound Agriculture d No Further Work Kona Commons SAIS  
Site 50-10-27-18509 D Lava Excavation Agriculture d No Further Work Kona Commons SAIS  
Site 50-10-27-18511 A Modified Overhang Habitation d Preservation Kona Commons SAIS

Site 50-10-27-18511 B Lava Excavation Agriculture d Preservation Kona Commons SAIS  
 Site 50-10-27-18511 C Modified Lava Tube Burial d, e Preservation (burial treatment) Kona Commons SAIS  
 Site 50-10-27-18511 D Lava Excavation Quarry d Preservation Kona Commons SAIS  
 Site 50-10-27-18511 E Lava Excavation Quarry d Preservation Kona Commons SAIS  
 Site 50-10-27-29111 C-Shaped Wall Habitation d No Further Work Urban Phase III AIS  
 Site 50-10-27-29112 C-Shaped Wall Habitation/Processing d No Further Work Urban Phase III AIS  
 Site 50-10-27-29143 E Modified Overhang Storage d No Further Work Urban Phase III AIS  
 Site 50-10-27-29143 F Modified Overhang Storage d No Further Work Urban Phase III AIS  
 Site 50-10-27-30207 Lava Excavation Uncertain d No Further Work Kona Commons SAIS  
 Site 50-10-27-30208 Stone Mound Marker d No Further Work Kona Commons SAIS  
 Site 50-10-27-30209 Enclosure Habitation d No Further Work Kona Commons SAIS  
 Site 50-10-27-30210 A Modified Overhang Storage d No Further Work Kona Commons SAIS  
 Site 50-10-27-30210 B Lava Excavation Uncertain d No Further Work Kona Commons SAIS  
 Site 50-10-27-30210 C C-Shaped Wall Habitation d No Further Work Kona Commons SAIS  
 Site 50-10-27-30210 D Enclosure Habitation d No Further Work Kona Commons SAIS  
 Site 50-10-27-30211 Petroglyph Communication d No Further Work Kona Commons SAIS  
 Site 50-10-27-30212 C-Shaped Wall Habitation d No Further Work Kona Commons SAIS  
 Site 50-10-27-30287 Trail Travel d Partial Preservation Kona Commons SAIS

The current AIS identified 121 sites, 36 previously recorded and 85 newly identified. These consist of State Inventory of Historic Places [SIHP] Sites 50-10-27-13256 through 13258, 13260 through 13262, 13269, 13271, 13272, 13274, 13275, 13280 through 13282, 18286 through 13288, 13293, 13294, 13298 through 13302, 13351, 13353, 13386, 25655, 25644, 25646 through 25649, and 29088 through 29176. Of these, one site, Site 29175, consists of 540 excavated lava pits.

The 121 historic sites documented during the current AIS survey are assessed for site integrity and for significance according to Hawaii Administrative Rules (HAR) §13-284-6 Criteria a-e. All the sites are considered significant for their information content (Criterion d). Six sites are considered significant for their distinctive characteristics or high artistic value (Criterion c). Twenty-one sites are considered significant for their cultural importance to the Native Hawaiian community (Criterion e). The four sites considered significant under Criterion e include probable smallshrines, a lava tube containing human skeletal remains, possible burial mounds, and 17 petroglyph fields.

Construction will have significant cumulative adverse impacts on cultural, archaeological, native plants, rare plants and animal species and historic elements resources in the proposed 67.2 acre for the Makalapua Project District that is irreversible. <https://casetext.com/case/ching-v-case> Clarence CHING and Mary Maxine KAHAULELIO v CASE; [7 CFR Parts 620](#) through [623](#) and [640](#) through [643](#)

The Constitution of the State of Hawai'i clearly states the duty of the State and its agencies is to preserve, protect, and prevent interference with the traditional and customary rights of native Hawaiians. Article XII, Section 7 requires the State to “protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by *ahupua'a* tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778” (2000). In spite of the establishment of the foreign concept of private ownership and western-style government, Kamehameha III (Kauikeaouli) preserved the peoples traditional right to subsistence. As a result in 1850, the Hawaiian Government confirmed the traditional access rights to native Hawaiian *ahupua'a* tenants to gather specific natural resources for customary uses from undeveloped private property and waterways under

the Hawaiian Revised Statutes (HRS) 7-1. In 1992, the State of Hawai'i Supreme Court, *see* <https://case-law.vlex.com/vid/ka-paakai-kaaina-v-891931919> *Kapaakai aina hou v Land Use Commission*. This should have an **Kapaakai Analysis**

reaffirmed HRS 7-1 and expanded it to include, “native Hawaiian rights...may extend beyond the *ahupua'a* in which a native Hawaiian resides where such rights have been customarily and traditionally exercised in this manner” (Pele Defense Fund v. Paty, 73 Haw.578, 1992).

Act 50, enacted by the Legislature of the State of Hawaii (2000) with House Bill 2895, relating to Environmental Impact Statements, proposes that:

...there is a need to clarify that the preparation of environmental assessments or environmental impact statement should identify and address effects on Hawaii's culture, and traditional and customary rights...[H.B. NO. 2895]

See <https://www.mondaq.com/unitedstates/environmental-law/1131142/pash-no-one-legacy-for-hawaii-land-use-and-shore> *PACH v Department of Planning*

It is my intention to inform you of two location concerns which would lead to not only violations of Federal and State of Hawaii law but also irreparable damage to the so called State of Hawaii Waters. To that end we shall start with explanations of applicable portions of the Clean Water Act of 1972 (encoded in 33 U.S.C. Chapter 26) which established the BASIC structure for regulating pollutant discharges into the waters of the United States.

\* The following information is United States Federal Law:

\* Clean Water Act Section IV Dust Control and Stabilization Excerpts:

(Federal Clean Water Act of 1977 (PL 95-217) and Hawaii Revised Statues (HRS) Chapter 342D)

**A. “Best management practices”:**

or “BMPs” means schedules of activities, prohibitions or designations of practices, maintenance procedures and other maintenance procedures, and other management practices to prevent or reduce the pollution of state waters.

Best management practices also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaked, sludge or waste disposal or drainage from raw material storage.

**B. EPA Dust Control Plan Examples:**

Water must be applied continually in front of or in conjunction with a scraper/grader/dozer.

Rule of Thumb: Area CANNOT dry out.

Acre Foot of water equals 325,851 gallons per acre of land. Therefore it is 67.2 acre of land times 325,851 equals to **218,997,187.5** gallons (**two hundred eighteen million nine hundred ninety-seven thousand one hundred eighty-seven and five tenths**) of water, were is this water coming from? WE are short of water on the Big Island. *See Reppun v Board of Water Supply 656 P.2d 57 (1982)* <https://law.justia.com/cases/hawaii/supreme-court/1982/7738-2.html>; *Public Trust Doctrine*

As mentioned above, Hilo lies on the windward (rainy) side of the Big Island and receives quite some precipitation. For example, downtown Hilo get 142 inches of rain per year. Compare this to the 9 inch at the resorts close to Waikoloa and 27 inches in downtown Kona

<https://www.lovebigisland.com/hilo/average-yearly-weather/#:~:text=As%20mentioned%20above%2C%20Hilo%20lies,27%20inches%20in%20downtown%20Kona.>

*See discussion infra Sections II.A–II.B; generally In re Contested Case Hearing re Conservation Dist. Use Application Ha-3568 for the Thirty Meter Telescope at the Mauna Kea Sci. Res., 143 Hawai‘i 379, 431 P.3d 752 (2018) [hereinafter Mauna Kea II].*

### **C. Water applied behind equipment is usually intended for compaction purposes and not dust control.**

Included in this law is the required ‘continual wetting of materials and stockpiles on site’. The site in questions is extremely dry most of the time and the equipment that could easily be damaged by dry and hot days.

*See <https://www.oyez.org/cases/2019/18-260;18-260> County of Maui v. Hawaii Wildlife Fund (4/23/2020)*

*See <https://www.environment-hawaii.org/?p=15588#:~:text=On%20September%2025%2C%20the%20County,porous%20lava>*

### **CLIMATE CHANGE**

MPD will be vulnerable to coastal hazards, including flooding, storm surges, shoreline erosion, saltwater intrusion and groundwater elevation changes, and related natural disasters associated with climate changes. *See <https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/> also *See <https://climate.hawaii.gov/hi-facts/sea-level-rise/>**

“It is the State Policy to preserve, protect, and where possible, to restore the natural resources of the coastal zone of Hawaii.

Special controls on developments within an area along the shoreline are necessary to avoid permanent losses of valuable resources and the foreclosure of management options, and to ensure that adequate access, by dedication or other means, to public owned or used beaches, recreation areas, and natural reserves is provided *See Hawaii Revised Statutes, Chapter 205A, Part II.*

*See <https://climatecasechart.com/case/navahine-f-v-hawaii-department-of-transportation/>*

### **Storm Water Runoff**

Construction debris can mix with storm water runoff can also be toxic to aquatic life. Construction Debris hazardous wastes like solvents, oil, metal, sediment, nitrogen, phosphorus, bacteria and other toxic **substances** can poison aquatic life.

Chapter 195D Conservation of Aquatic Life, Wildlife, and Land Plants  
195D-2 Definitions, As used in this chapter:



“Aquatic life” means any type of species of mammal, fish, amphibian, reptile, mollusk, crustacean, arthropod, invertebrate, coral, or other animals that inhabit the freshwater or marine environment, and includes any part, product, egg, or offspring thereof, or freshwater or marine plants, including seeds, roots, and other parts thereof.

The Hawaii’s Threatened and Endangered Species list can be view on Department of Land Natural Resources under State of Hawaii, Division of Forestry and Wildlife.

<http://dlnr.hawaii.gov/wildlife/hcp/>

See <https://law.justia.com/cases/hawaii/supreme-court/1970/4833-2.html>; 472 P.2d 509 (1970)  
Rodrigues v. State

In the vicinity of the MPD there are as followed;

Hawaiian Hoary bat

Hawaiian Seabirds

Hawaiian Petrel

Bandrumped Storm-Petrel,

Newell’s Shearwater

Larvae of Blackburn’s Sphinx Moth (they feed and lay eggs and larvae under the tobacco tree it is unacceptable to remove and replace the tree and the Sphinx Moth)

which is under the Hawaii’s Threatened and Endangered Species list. Which is Identified in the VOLUME 1-III DEA; [40 CFR 1508.14](#)

Therefore this should be an EIS (Environmental Impact Statement) and not a EA.

I reserve my right for a contested case.

\_\_\_\_\_/s/\_\_\_\_\_  
Cindy Freitas

October 1, 2024

Via email: [makainanqi@gmail.com](mailto:makainanqi@gmail.com)

Cindy Freitas

SUBJECT: Draft Environmental Assessment for the Proposed Makalapua Project District Project; Kailua-Kona, County of Hawai'i, Hawai'i

Dear Ms. Freitas:

Thank you for your email dated April 7, 2024 providing comments on the Draft Environmental Assessment (EA) for the Proposed Makalapua Project District (MPD) Project. On behalf of the Lili'uokalani Trust (LT), we offer the following information in response to the comments received:

**Comment No. 1:**

**HISTORICAL PROPERTY' S PRE- CONTACT AND HISTORICAL**

*Site 50-10-27-13260 A Modified Sink Water Catchment c, d Preservation Urban Phase III AIS*

*Site 50-10-27-13260 B Modified Sink Water Catchment c, d Preservation Urban Phase III AIS*

*Site 50-10-27-13260 C Modified Sink Water Catchment c, d Preservation Urban Phase III AIS*

*Site 50-10-27-13261 Enclosure Ceremonial d, e Preservation Urban Phase III AIS*

*Site 50-10-27-18502 Modified Depression Habitation d No Further Work Kona Commons SAIS*

*Site 50-10-27-18508 Waived Overhang Habitation d No Further Work Kona Commons SAIS*

*Site 50-10-27-18509 A Stone Mound Agriculture d No Further Work Kona Commons SAIS*

*Site 50-10-27-18509 B Filled Depression None No Further Work Kona Commons SAIS*

*Site 50-10-27-18509 C Stone Mound Agriculture d No Further Work Kona Commons SAIS*

*Site 50-10-27-18509 D Lava Excavation Agriculture d No Further Work Kona Commons SAIS*

*Site 50-10-27-18511 A Modified Overhang Habitation d Preservation Kona Commons SAIS*  
*Site 50-10-27-18511 B Lava Excavation Agriculture d Preservation Kona Commons SAIS*  
*Site 50-10-27-18511 C Modified Lava Tube Burial d, e Preservation (burial treatment) Kona Commons SAIS*  
*Site 50-10-27-18511 D Lava Excavation Quarry d Preservation Kona Commons SAIS*  
*Site 50-10-27-18511 E Lava Excavation Quarry d Preservation Kona Commons SAIS*  
*Site 50-10-27-29111 C- Shaped Wall Habitation d No Further Work Urban Phase III AIS*  
*Site 50-10-27-29112 C- Shaped Wall Habitation/ Processing d No Further Work Urban Phase III AIS*  
*Site 50-10-27-29143 E Modified Overhang Storage d No Further Work Urban Phase III AIS*  
*Site 50-10-27-29143 F Modified Overhang Storage d No Further Work Urban Phase III AIS*  
*Site 50-10-27-30207 Lava Excavation Uncertain d No Further Work Kona Commons SAIS*  
*Site 50-10-27-30208 Stone Mound Marker d No Further Work Kona Commons SAIS*  
*Site 50-10-27-30209 Enclosure Habitation d No Further Work Kona Commons SAIS*  
*Site 50-10-27-30210 A Modified Overhang Storage d No Further Work Kona Commons SAIS*  
*Site 50-10-27-30210 B Lava Excavation Uncertain d No Further Work Kona Commons SAIS*  
*Site 50-10-27-30210 C C- Shaped Wall Habitation d No Further Work Kona Commons SAIS*  
*Site 50-10-27-30210 D Enclosure Habitation d No Further Work Kona Commons SAIS*  
*Site 50-10-27-30211 Petroglyph Communication d No Further Work Kona Commons SAIS*  
*Site 50-10-27-30212 C- Shaped Wall Habitation d No Further Work Kona Commons SAIS*  
*Site 50-10-27-30287 Trail Travel d Partial Preservation Kona Commons SAIS*

*The current AIS identified 121 sites, 36 previously recorded and 85 newly identified. These consist of State Inventory of Historic Places (SIHP) Sites 50-10-27-13256 through 13258, 13260 through 13262, 13269, 13271, 13272, 13274, 13275, 13280 through 13282, 18286 through 13288, 13293, 13294, 13298 through 13302, 13351, 13353, 13386, 25655, 25644, 25646 through 25649, and 29088 through 29176. Of these, one site, Site 29175, consists of 540 excavated lava pits.*

*The 121 historic sites documented during the current AIS survey are assessed for site integrity and for significance according to Hawaii Administrative Rules (HAR) §13-284-6 Criteria a-e. All the sites are considered significant for their information content (Criterion d). Six sites are considered significant for their distinctive characteristics or high artistic value (Criterion c). Twenty-one sites are considered significant for their cultural importance to the Native Hawaiian community (Criterion e). The four sites considered significant under Criterion e include probable small shrines, a lava tube containing human skeletal remains, possible burial mounds, and 17 petroglyph fields.*

*Construction will have significant cumulative adverse impacts on cultural, archaeological, native plants, rare plants and animal species and historic elements resources in the proposed 67.2 acre for the Makalapua Project District that is irreversible. <https://casetext.com/case/ching-v-case> Clarence CHING and Mary Maxine KAHAULELIO v CASE; [7 CFR Parts 620 through 623](#) and [640 through 643](#)*

**Response:** Thank you for your comment. We understand the Keahuolū ahupua‘a to be rich in cultural and historical resources. As such, LT has previously commissioned two (2) archaeological inventory survey (AIS) reports for the Kona Commons development and LT’s Urban Phase III lands. These areas encompass the MPD project site. The AIS reports identify historic sites present within the project area and advance measures to mitigate or avoid impacts to these sites during development. The AIS reports identified a total of 16 archaeological sites containing 29 component features within the MPD area. Of these, one (1) site was identified for burial treatment and preservation, an additional three (3) sites were identified for preservation, and one (1) site was identified for data recovery. The AIS reports with these recommendations have been reviewed and accepted by the State Historic Preservation Division (SHPD).

Since acceptance of the AIS reports, a burial treatment plan, historic preservation plan, data recovery plan, and archaeological monitoring plan have been prepared for the sites mentioned above. All of these mitigation plans have also been reviewed and accepted by the SHPD. The burial treatment plan and its associated preservation measures for the burial feature was implemented in 2019. With implementation of these plans as the project progresses, the project will protect and preserve the valued cultural and historic resources within the project area in conformance with Chapter 6E, Hawai‘i Revised Statutes (HRS).

In addition, a flora and fauna survey was conducted for the project site and identified known endangered species within the project site and included recommended mitigation measures such as out planting those known

endangered species and including them in LT's program offerings so that beneficiaries can learn about the significance of those plants. The EA also discusses mitigation measures received from the Department of Land and Natural Resources, Division of Forestry and Wildlife for State-listed and endemic species known to frequent the area. These mitigation measures will be implemented with the project.

**Comment No. 2:**

*The Constitution of the State of Hawai'i clearly states the duty of the State and its agencies is to preserve, protect, and prevent interference with the traditional and customary rights of native Hawaiians. Article XII, Section 7 requires the State to "protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua'a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778" (2000). In spite of the establishment of the foreign concept of private ownership and western-style government, Kamehameha III (Kauikeaouli) preserved the peoples traditional right to subsistence. As a result in 1850, the Hawaiian Government confirmed the traditional access rights to native Hawaiian ahupua'a tenants to gather specific natural resources for customary uses from undeveloped private property and waterways under the Hawaiian Revised Statutes (HRS) 7-1. In 1992, the State of Hawai'i Supreme Court, see <https://case-law.vlex.com/vid/ka-paakai-kaaina-v-891931919> Kapaakai aina hou v Land Use Commission. This should have an **Kapaakai Analysis** reaffirmed HRS 7-1 and expanded it to include, "native Hawaiian rights... may extend beyond the ahupua'a in which a native Hawaiian resides where such rights have been customarily and traditionally exercised in this manner" (Pele Defense Fund v. Paty, 73 Haw.578, 1992).*

**Response:** As part of the EA process, a Cultural Impact Assessment (CIA) was conducted, which included archival research as well as interviews with descendants of Keahuolū and others knowledgeable of the area, to determine what impacts, if any, the proposed development would have on known traditional and customary practices and resources at the project site. The work conducted in preparing the CIA followed the Ka Pa'akai analysis framework, however the framework was not clearly identified in the CIA report included in the Draft EA. Following publication of the Draft EA and in response to comments received, the CIA was amended to include a clearly identified Ka Pa'akai analysis. The amended CIA will be included and discussed in the Final EA for the project.

**Comment No. 3:**

*Act 50, enacted by the Legislature of the State of Hawaii ( 2000) with House Bill 2895, relating to Environmental Impact Statements, proposes that:*

*... there is a need to clarify that the preparation of environmental assessments or environmental impact statement should identify and address effects on Hawai'i's culture, and traditional and customary rights...(H.B. NO. 2895)*

See <https://www.mondaq.com/UnitedStates/environmental-law/1131142/pash-no-one-legacyfor-hawaiiand-use-and-shore> PACH v Department of Planning

**Response:** The EA was prepared truthfully and in accordance with State standards and regulations. It was determined that an Environmental Impact Statement (EIS) was not required for the project through the environmental review process. In the Chapter 343, HRS environmental review process, an accepting agency for an EA (in this case, the County of Hawai'i Planning Department) determines whether or not a proposed action may have a significant impact on the environment using the "Significance Criteria" pursuant to Section 11-200.1-13, Hawaii Administrative Rules (HAR). Should it be determined that the proposed action would have a significant impact on the environment through the significance criteria analysis, preparation of an EIS would be required. To support the significance criteria analysis, various technical studies have been prepared by experts to analyze the project's potential impacts on specific areas, including infrastructure, traffic, biological resources, and archaeological resources and where applicable, included recommended mitigative strategies to avoid or manage impacts so that they would not be substantial. Based on the significance criteria analysis supported by the technical studies included in the Draft EA, the Planning Department anticipated that the project would result in a Finding of No Significant Impact (FONSI) and therefore, the Draft EA was published with an "Anticipated Finding of No Significant Impact" (AFONSI) in the Environmental Review Program's Environmental Notice on March 8, 2024.

The Draft EA was revised to incorporate the comments received during the 30-day public review period and was submitted to the Planning Department for review as a Final EA. Based on the significance criteria analysis, the Planning Department determined that the project can qualify for a FONSI determination, and as such, preparation of an EIS is not required.

It is also noted that a Final EA (FONSI) was published in April 2019 for the previous iteration of the MPD, which included larger commercial components and fewer residential units (hereinafter referred to as the "2019

Final EA”). The results of the technical studies and the significance criteria analysis for the current iteration of the MPD (2024 Final EA) do not significantly differ from the 2019 Final EA (FONSI).

**Comment No. 4:**

*It is my intention to inform you of two location concerns which would lead to not only violations of Federal and State of Hawaii law but also irreparable damage to the so called State of Hawaii Waters. To that end we shall start with explanations of applicable portions of the Clean Water Act of 1972 encoded in 33 U.S. C. Chapter 26) which established the BASIC structure for regulating pollutant discharges into the waters of the United States.*

- ❖ *The following information is United States Federal Law:*
- ❖ *Clean Water Act Section IV Dust Control and Stabilization Excerpts: Federal Clean Water Act of 1977 (PL 95- 217) and Hawaii Revised Statutes (HRS) Chapter 342D)*

**A. “Best management practices”:**

*Or “BMPs” means schedules of activities, prohibitions or designations of practices, maintenance procedures and other maintenance procedures, and other management practices to prevent or reduce the pollution of state waters.*

*Best management practices also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaked, sludge or waste disposal or drainage from raw material storage.*

**B. EPA Dust Control Plan Examples:**

*Water must be applied continually in front of or in conjunction with a scraper/grader/ dozer. Rule of Thumb: Area CANNOT dry out.*

*Acre Foot of water equals 325,851 gallons per acre of land. Therefore it is 67.2 acre of land times 325,851 equals to **218,997,187.5** gallons (**two hundred eighteen million nine hundred ninety- seven thousand one hundred eighty- seven and five tenths**) of water, where is this water coming from? WE are short of water on the Big Island. See Reppun v Board of Water Supply 656 P.2d 57(1982)<https://lawjustia.com/cases/hawaii/supreme-court/1982/7738-2.html> ; Public Trust Doctrine*

*As mentioned above, Hilo lies on the windward (rainy) side of the Big Island and receives quite some precipitation. For example, downtown Hilo get 142*

*inches of rain per year. Compare this to the 9 inch at the resorts close to Waikoloa and 27 inches in downtown Kona*  
[https://www.lovebigisland.com/hilo/average-yearlv-weather/#:-:text=As%20mentioned%20above%2C%20Hilo%20lies,27%20inches%20in%20downtow n%20Kona](https://www.lovebigisland.com/hilo/average-yearlv-weather/#:-:text=As%20mentioned%20above%2C%20Hilo%20lies,27%20inches%20in%20downtow%20n%20Kona).

*See discussion infra Sections ILA-II.B; generally In re Contested Case Hearing re Conservation Dist. Use Application Ha- 3568 for the Thirty Meter Telescope at the Mauna Kea Sci. Res., 143 Hawai'i 379, 431 P.3d 752 (2018) (hereinafter Mauna Kea II).*

**C. Water applied behind equipment is usually intended for compaction purposes and not dust control.**

*Included in this law is the required "continual wetting of materials and stockpiles on site". The site in questions is extremely dry most of the time and the equipment that could easily be damaged by dry and hot days.*

See [https://www.oyez.org/cases/2019/18-260;18-260CountyofMauiv.HawaiiWildlifeFund\(4/23/20\)](https://www.oyez.org/cases/2019/18-260;18-260CountyofMauiv.HawaiiWildlifeFund(4/23/20)).

See <https://www.environment-hawaii.org/?p=15588#:~:text=On%20September%2025%2C%20the%20County,porous%20lava>

**Response:** As stated in the Infrastructure Report prepared for the project, stormwater runoff generated by the proposed development will be collected by swales, ditches, gutters, inlets and/or catch basins then conveyed to drywells and/or infiltration areas for onsite disposal so as to not impact downstream properties, including groundwater and nearshore water quality. Drainage improvements for the project will be required to conform to the "Storm Drainage Standards", Department of Public Works, County of Hawai'i, dated October 1970, as amended. In addition, the project will consider Low Impact Development practices in the design of stormwater drainage systems and incorporate Best Management Practices (BMPs) to mitigate the effects on non-point source pollutants in stormwater discharges.

Hawai'i County Code, Chapter 10, Erosion and Sediment Control discusses recommended dust control measures during grading operations such as "...sprinkling of water, applying mulch treated with bituminous material, or applying hydromulch." The continuous application of water is ill-advised as it would not be a responsible use of this precious resource. Instead, proper grading and compaction will be performed at the optimum moisture content of the soil based on the project's geotechnical engineer's recommendations to avoid using a substantial amount of water during grading.



**Comment No. 5:**

**Climate Change**

*MPD will be vulnerable to coastal hazards, including flooding, storm surges, shoreline erosion, saltwater intrusion and groundwater elevation changes, and related natural disasters associated with climate changes. See <https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/> also See <https://climate.hawaii.gov/hi-facts/sea-level-rise/>*

*“It is the State Policy to preserve, protect, and where possible, to restore the natural resources of the coastal zone of Hawaii. Special controls on developments within an area along the shoreline are necessary to avoid permanent losses of valuable resources and the foreclosure of management options, and to ensure that adequate access, by dedication or other means, to public owned or used beaches, recreation areas, and natural reserves is provided See Hawaii Revised Statutes, Chapter 205A, Part II. See <https://climatecasechart.com/case/navahine-f-v-hawaii-department-of-transportation/>*

**Response:** As noted in the Draft EA, the MPD site is not located along the coast, is outside of the tsunami evacuation area, and is outside (inland of) the projected 3.2-foot sea level rise exposure area according to the Hawai'i Climate Change Mitigation and Adaptation Commission's 2017 Hawai'i Sea Level Rise Report and Hawai'i Sea Level Rise Viewer. The project site is also located outside of a flood zone as designated by the Federal Emergency Management Agency's flood insurance rate map and as such, is not subject to development restrictions.

The project site is located within the Special Management Area (SMA) for the County of Hawai'i. As such, an SMA Use Permit application will be filed at a later date for the project in accordance with the provisions of HRS, Chapter 205A. The SMA Use Permit application will require review and approval by the Leeward Planning Commission.

**Comment No. 6:**

**Storm Water Runoff**

*Construction debris can mix with storm water runoff can also be toxic to aquatic life. Construction Debris hazardous wastes like solvents, oil, metal, sediment, nitrogen, phosphorus, bacteria and other toxic **substances** can poison aquatic life.*

*Chapter 195D Conservation of Aquatic Life, Wildlife, and Land Plants  
195D-2 Definitions, As used in this chapter:*

*“Aquatic life” means any type of species of mammal, fish, amphibian, reptile, mollusk, crustacean, arthropod, invertebrate, coral, or other animals that inhabit the freshwater or marine environment, and includes any part, product, egg, or offspring thereof, or freshwater or marine plants, including seeds, roots, and other parts thereof.*

**Response:** We acknowledge your comments regarding stormwater runoff. Drainage infrastructure improvements and BMPs will be incorporated into the project design to collect stormwater for disposal onsite. Drainage improvements will be designed in accordance with the “Storm Drainage Standards”, Department of Public Works, County of Hawai‘i, dated October 1970, as amended. Permanent BMPs and LID strategies, such as permeable paving systems, bio-swales and bio-filtration for stormwater management, are being considered for the proposed project to minimize pollutants from entering the ground and nearshore waters. By incorporating these measures, there will be no increase in stormwater runoff leaving the site and adverse impacts to downstream properties are not anticipated.

**Comment No. 7:**

*The Hawaii’s Threatened and Endangered Species list can be view on Department of Land Natural Resources under State of Hawaii, Division of Forestry and Wildlife. <http://dlnr.hawaii.gov/wildlife/hcp/>  
See <https://law.justia.com/cases/hawaii/supreme-court/1970/4833-2.html>;  
472 P.2d 509 (1970 Rodrigues v. State)*

*In the vicinity of the MPD there are as followed;  
Hawaiian Hoary bat  
Hawaiian Seabirds Hawaiian Petrel Bandrumped Storm-Petrel,  
Newell 's Shearwater  
Larvae of Blackburn 's Sphinx Moth (they feed and lay eggs and larvae under the tobacco tree it is unacceptable to remove and replace the tree and the Sphinx Moth)  
which is under the Hawaii’s Threatened and Endangered Species list.  
Which is Identified in the VOLUME I-III DEA; **40 CFR 1508.14***

**Response:** Thank you for providing the information related to threatened and endangered species. As noted previously, as part of the EA process, a flora and fauna survey was conducted for the project area to identify native, threatened, or endangered species of plants or animals within the project area. The report also included recommended mitigation measures such as out planting known endangered species observed on the site and including them in LT’s program offerings so that beneficiaries can learn about the significance of those plants. The EA also discusses mitigation measures received from the State of Hawai‘i, Department of Land and Natural Resources, Division of Forestry and Wildlife related to State-listed

waterbirds (*i.e.*, *ae'o*, *'alae ke'oke'o*, *nēnē*), the endemic Hawaiian short-eared owl (*pueo*), State-listed Hawaiian hawk (*'io*), and the State-listed Blackburn's sphinx moth. The project will implement the recommended mitigation measures as much as practicable.

**Comment No. 8:**

*Therefore this should be an EIS (Environmental Impact Statement) and not a EA. I reserve my right for a contested case.*

**Response:** Please see our response for Comment No. 3.

We appreciate your input and will include a copy of your letter along with this response letter in the Final EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uoklani Trust  
Keith Uemura, Park Engineering, Inc.

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**From:** Email Service <[mammanaclare@outlook.com](mailto:mammanaclare@outlook.com)>  
**Sent:** Friday, April 5, 2024 3:30 PM  
**To:** [planning@hawaiicounty.gov](mailto:planning@hawaiicounty.gov); [besmeralda@onipaa.org](mailto:besmeralda@onipaa.org); General eMail  
<[planning@munekiyohiraga.com](mailto:planning@munekiyohiraga.com)>  
**Cc:** Sherilyn Loa <[leinaninavas@gmail.com](mailto:leinaninavas@gmail.com)>; cindy Freitas <[makainangi@gmail.com](mailto:makainangi@gmail.com)>; Mary Maxine Kahalelio <[mmkahalelio@yahoo.com](mailto:mmkahalelio@yahoo.com)>  
**Subject:** Comment period concerning Queen Liliuokalani Lands/Mission Statement

**April 5, 2024**

[planning@hawaiicounty.gov](mailto:planning@hawaiicounty.gov) - County Planning Department  
[besmeralda@onipaa.org](mailto:besmeralda@onipaa.org) - Liliuokalani Trust  
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**Aloha Kakou,**

**For the Record I am speaking from the American Declaration on the Rights of Indigenous Peoples. (Adopted at the third plenary session, held on June 5, 2016, The General Assembly.)**

**▼ Article XIX. Right to protection of a healthy environment**

- 1. Indigenous peoples have the right to live in harmony with nature and to a healthy, safe, and sustainable environment, essential conditions for the full enjoyment of the rights to life and to their spirituality, cosmivision, and collective well-being.**
- 2. Indigenous peoples have the right to conserve, restore, and protect the environment and to manage their lands, territories, and resources in a sustainable way.**
- 3. Indigenous peoples have the right to be protected against the introduction, abandonment, dispersion, transit, indiscriminate use, or deposit of any harmful substance that could adversely affect indigenous communities, lands, territories, and resources.**
- 4. Indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources. States shall establish and implement assistance programs for indigenous peoples for such conservation and protection, without discrimination.**

**Our Queen never went to war and never signed a treaty so that we would be sovereign, and we still are. She made sure she set aside lands for future generations, for na keiki. This connection of I’o, aina ame kanaka is still in place, crucial for our customary traditional and cultural practices which are flourishing and getting stronger. Crucial for Kapaakai Analysis. There are over 3000 acres she set aside for us to survive, to use the Kona Field System to sustain us, to harvest laulapaau for health reasons that include “spirituality, cosmivision, and collective well-being”, which are our Indigenous Rights.**

**This Makalapua District Project; is in an SMA Historical District and wants to turn agricultural lands into commercial lands, create in the first phase of this “ Makalapua Project District”**

**(Project Description states:) 600 residential units; 150 hotel rooms; 220,900 square feet of commercial use. *This is a phased development meaning this is only the first of more to come in the future.* And it's just 60 low-income housing and 540 market homes ". This phase of a phase started with 300 acres and wants to expand to 3000 acres. This is where it all stops, the laws and rights/rites are on our side, Na Iwi Kupuna on our side as we stand kupaa.**

#### **Ka Pa'akai Analysis**

**Article XII, Section 7 of the Hawai'i Constitution obligates the State Land Use Commission (LUC) to protect the reasonable exercise of customarily and traditionally exercised rights of native Hawaiians to the extent feasible when granting a petition for reclassification of district boundaries. In order to effectuate the State's obligation to protect native Hawaiian customary and traditional practices while reasonably accommodating competing private interests, the Hawai'i Supreme provided the following analytical framework as an outcome of Ka Pa 'akai OKa 'a/na v. Land Use Commission (94 Hawai'i 3], 7 P.3d 1068, September 1], 2000,). The framework is referred to as Ka Pa 'akai Analysis and consists of three parts:**

- 1. Identify the scope of "valued cultural, historical and natural resources" in the petition area, including the extent to which traditional and customary rights and practices are exercised in the affected area;**
- 2. Determine the extent to which those resources, including traditional and customary native Hawaiian rights, will be affected or impaired by the proposed action; and**
- 3. Identify feasible actions, if any, that should be taken by the LUC to reasonably protect Native Hawaiian rights and practices if they are found to exist.**

***The QLCC Deed of Trust states that "all the property of the Trust Estate, both principal and income...shall be used by the Trustees for the benefit of orphan and other destitute children in the Hawaiian Islands, the preference given to Hawaiian children of pure or part aboriginal blood" (The Lili'uokalani Trust, 2016). The proposed Makalapua Project District is intended to create long-term value for the Trust and provide financial support for its programs for future generations.***

[https://files.hawaii.gov/dbedt/erp/EA\\_EIS\\_Library/2019-04-23-HA-FEA-Makalapua-Project-District-Volume-I.pdf](https://files.hawaii.gov/dbedt/erp/EA_EIS_Library/2019-04-23-HA-FEA-Makalapua-Project-District-Volume-I.pdf)

[https://files.hawaii.gov/dbedt/erp/Doc\\_Library/2024-03-08-HA-DEA-Makalapua-Project-District-Vol-I.pdf](https://files.hawaii.gov/dbedt/erp/Doc_Library/2024-03-08-HA-DEA-Makalapua-Project-District-Vol-I.pdf)

***Both of the letters in the files above concerning the EA in both 2019 and 2024 falsify "that the County of Hawaii Planning Department hereby transmits the Draft Environmental Assessment and Anticipated Finding of No Significant Impact (DEA-AFONSI) for the proposed Makalapua Project District in Kailua-Kona, Hawaii, for publication in the next available edition of the Environmental Notice." It is once again shameful to see both Mayor Roth and Zendo Kern falsely state "that the Environmental Assessment has no significant impact" while customary traditional and cultural practices are being violated, endangered animals and plants will be effected, Kapaakai (PASH) is being violated, our sewer systems are failing for the last three***

**mayors and dumping 1.7 million gallons of fecal matter and chemicals etc. from the sewage system a day in our kai/where a heiau is, historical site deeply being affected I demand for the above reasons and more, that an EIS is triggered by an inadequate EA.**

**(<https://www.westhawaii.com/2023/09/28/hawaii-news/lawsuit-filed-against-hawaii-county/>**

**<https://earthjustice.org/press/2023/earthjustice-files-lawsuit-to-clean-up-kealakehe-wastewater-treatment-plant-sewage>**

**Will this proposed action significantly affect the quality of the human environment (40 CFR 1508.14)? For example, will it significantly alter or destroy valuable wetlands, important farmlands, cultural resources, or threatened and endangered species? Will it affect social values, water quality, fish and wildlife habitats, or wilderness and scenic areas?) Reread the Queens' mission statement. Do the EIS.**

**There is no water for these absurd projects for the wealthy, historical sites will be demolished in their plans and on and on. They are content with more money, raping of the land and her keiki in all forms, drilling deeper and deeper in waters, through pohaku which should never be done. The disrespect show to our kupuna in all forms is shameful. We will not allow it to happen.**

**We have an amazing Queen, Queen Liliuokalani that still leads us, one of her most used statements; E Onipa'a Ka'imi Na'auao (Be steadfast in the seeking of knowledge). We stand with Na Iwi Kupuna to assure that these lands will not be made into hotels/condos for the rich as we have one of the highest native populations homeless, are now the 6<sup>th</sup> highest prostitution of our children (the average age now desired by these pedophiles is 4 yrs old and 16 yrs. old. Our airports (which is also on the Queens' lands for her keiki,) are expanding for the private jets and the military which is where the sex trafficking can prosper. There is no accountability for the wealthy and military as more and more children go missing, in fact they want to now build them hotels and put more Hawaiians on the streets, and a place for sex trafficking to prosper.**

**We as a people. a strong lahui, cultural and indigenous practitioners, kiai, na ohana will stop the raping our our earth as we stay as stewards for the land, the waters, our keiki, our ohana. It is your due diligence to do a EIS.**

**Mahalo for your time,**

**Me ka haahaa,**

**Clare Loprinzi, Indigenous Practitioner, Traditional Midwife, Mama, Nonna, Activist and lover of our Queen, all of her children, all she stood and continues to stand for.**

October 1, 2024

Via email: [mammanaclare@outlook.com](mailto:mammanaclare@outlook.com)

Clare Loprinzi

SUBJECT: Draft Environmental Assessment for the Proposed Makalapua Project District Project; Kailua-Kona, County of Hawai'i, Hawai'i

Dear Ms. Loprinzi:

Thank you for your email dated April 5, 2024 providing comments on the Draft Environmental Assessment (EA) for the Proposed Makalapua Project District (MPD) Project. On behalf of the Lili'uokalani Trust (LT), we offer the following information in response to the comments received:

**Comment No. 1:**

*For the Record I am speaking from the American Declaration on the Rights of Indigenous Peoples. (Adopted at the third plenary session, held on June 5, 2016, The General Assembly.) ▼ Article XIX. Right to protection of a healthy environment*

- 1. Indigenous peoples have the right to live in harmony with nature and to a healthy, safe, and sustainable environment, essential conditions for the full enjoyment of the rights to life and to their spirituality, cosmovision, and collective well-being.*
- 2. Indigenous peoples have the right to conserve, restore, and protect the environment and to manage their lands, territories, and resources in a sustainable way.*
- 3. Indigenous peoples have the right to be protected against the introduction, abandonment, dispersion, transit, indiscriminate use, or deposit of any harmful substance that could adversely affect indigenous communities, lands, territories, and resources.*
- 4. Indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources. States shall establish and implement assistance programs for indigenous peoples for such conservation and protection, without discrimination.*

**Response:** Mahalo for taking time to provide your mana‘o on the proposed MPD Project.

**Comment No. 2:**

*Our Queen never went to war and never signed a treaty so that we would be sovereign, and we still are. She made sure she set aside lands for future generations, for na keiki. This connection of l’o, aina ame kanaka is still in place, crucial for our customary traditional and cultural practices which are flourishing and getting stronger. Crucial for Kapaakai Analysis. There are over 3000 acres she set aside for us to survive, to use the Kona Field System to sustain us, to harvest laaulapaau for health reasons that include “spirituality, cosmovision, and collective well-being”, which are our Indigenous Rights.*

**Response:** We understand your concerns regarding the project’s potential for impacts to traditional and customary Native Hawaiian rights and practices. We note your comment that the Queen set aside “over 3000 acres...for us to survive, to use the Kona Field System to sustain us, to harvest la‘au lapa‘au for health reasons...” We would like to clarify that the Queen’s lands were placed in Trust to provide income generation to support her beneficiaries: orphaned and destitute children within these Hawaiian Islands, with preference given to those of pure or part-Aboriginal blood. The lands were not endowed for public benefit or the community at large.

**Comment No. 3:**

*This Makalapua District Project; is in an SMA Historical District and wants to turn agricultural lands into commercial lands, create in the first phase of this “Makalapua Project District” (Project Description states:) 600 residential units; 150 hotel rooms; 220,900 square feet of commercial use. “This is a phased development meaning this is only the first of more to come in the future.” And it’s just 60 low-income housing and 540 market homes. This phase of a phase started with 300 acres and wants to expand to 3000 acres. This is where it all stops, the laws and rights/rites are on our side, Na Iwi Kupuna on our side as we stand kupaa.*

**Response:** We acknowledge your comment that the MPD site is located within the Special Management Area (SMA). LT will submit an SMA Use Permit application to the Planning Department for review and processing after completion of the environmental review process. With regard to the MPD being within a Historical District, we note that the County of Hawai‘i does not have Historic District zoning designations or overlay districts. However, as further discussed below, in consultation with the State Historic Preservation Division (SHPD), various archaeological studies and



mitigation measures have been completed for the MPD site to mitigate potential impacts on significant archaeological features.

It is noted that the proposed MPD is not part of a larger development.

**Comment No. 4:**

***Ka Pa‘akai Analysis***

*Article XII, Section 7 of the Hawai‘i Constitution obligates the State Land Use Commission (LUC) to protect the reasonable exercise of customarily and traditionally exercised rights of native Hawaiians to the extent feasible when granting a petition for reclassification of district boundaries. In order to effectuate the State’s obligation to protect native Hawaiian customary and traditional practices while reasonably accommodating competing private interests, the Hawai‘i Supreme provided the following analytical framework as an outcome of Ka Pa ‘akai Oka ‘a/na v. Land Use Commission (94 Hawai‘i 3), 7 P.3d 1068, September 1, 2000). The framework is referred to as Ka Pa ‘akai Analysis and consists of three parts:*

- 1. Identify the scope of “valued cultural, historical and natural resources” in the petition area, including the extent to which traditional and customary rights and practices are exercised in the affected area;*
- 2. Determine the extent to which those resources, including traditional and customary native Hawaiian rights, will be affected or impaired by the proposed action; and*
- 3. Identify feasible actions, if any, that should be taken by the LUC to reasonably protect Native Hawaiian rights and practices if they are found to exist.*

**Response:** We acknowledge your comment. As part of the EA process, a Cultural Impact Assessment (CIA) was conducted, which included archival research as well as interviews with descendants of Keahuolū and others knowledgeable of the area, to determine what impacts, if any, the proposed development would have on known traditional and customary practices and resources at the project site. The work conducted in preparing the CIA followed the Ka Pa‘akai analysis framework, however the framework was not clearly identified in the CIA report included in the Draft EA. Following publication of the Draft EA and in response to comments received from the public as well as the Land Use Commission, the CIA was amended to include a clearly identified Ka Pa‘akai analysis. The amended CIA will be included and discussed in the Final EA for the project.

**Comment No. 5:**

*The QLCC Deed of Trust states that “all the property of the Trust Estate, both principal and income...shall be used by the Trustees for the benefit of orphan and other destitute children in the Hawaiian Islands, the preference given to Hawaiian children of pure or part aboriginal blood” (The Lili’uokalani Trust, 2016). The proposed Makalapua Project District is intended to create long-term value for the Trust and provide financial support for its programs for future generations.*

**Response:** Mahalo for your comment and acknowledgement of LT’s Deed of Trust. As you mentioned, the MPD site is part of LT’s endowment, and the development of this project will provide sustainable income for LT to fund its program offerings and operations statewide in perpetuity.

**Comment No. 6:**

[https://files.hawaii.gov/dbedt/erp/EA\\_EIS\\_Library/2019-04-23-HA-FEA-Makalapua-Project-District-Volume-I.pdf](https://files.hawaii.gov/dbedt/erp/EA_EIS_Library/2019-04-23-HA-FEA-Makalapua-Project-District-Volume-I.pdf)

[https://files.hawaii.gov/dbedt/erp/Doc\\_Library/2024-03-08-HA-DEA-Makalapua-Project-District-Vol-I.pdf](https://files.hawaii.gov/dbedt/erp/Doc_Library/2024-03-08-HA-DEA-Makalapua-Project-District-Vol-I.pdf)

*Both of the letters in the files above concerning the EA in both 2019 and 2024 falsify “that the County of Hawaii Planning Department hereby transmits the Draft Environmental Assessment and Anticipated Finding of No Significant Impact (DEA-AFONSI) for the proposed Makalapua Project District in Kailua-Kona, Hawaii, for publication in the next available edition of the Environmental Notice.” It is once again shameful to see both Mayor Roth and Zendo Kern falsely state “that the Environmental Assessment has no significant impact” while customary traditional and cultural practices are being violated, endangered animals and plants will be effected, Kapaakai (PASH) is being violated, our sewer systems are failing for the last three mayors and dumping 1.7 million gallons of fecal matter and chemicals etc. from the sewage system a day in our kai/where a heiau is, historical site deeply being affected I demand for the above reasons and more, that an EIS is triggered by an inadequate EA.*

**Response:** The EA was prepared truthfully and in accordance with State standards and regulations. It was determined that an Environmental Impact Statement (EIS) was not required for the project through the environmental review process. In the Chapter 343, Hawai’i Revised Statutes (HRS) environmental review process, an accepting agency for an EA in this case, the County of Hawai’i Planning Department) determines whether or not a proposed action may have a significant impact on the environment using the “Significance Criteria” pursuant to Section 11-200.1-13, Hawaii Administrative Rules

(HAR). Should it be determined that the proposed action would have a significant impact on the environment through the significance criteria analysis, preparation of an EIS would be required. To support the significance criteria analysis, various technical studies have been prepared by experts to analyze the project's potential impacts on specific areas, including infrastructure, traffic, biological resources, and archaeological resources and where applicable, included recommended mitigative strategies to avoid or manage impacts so that they would not be substantial. For example, the flora and fauna survey identified known endangered species within the project site and included recommended mitigation measures such as out planting those known endangered species and including them in LT's program offerings so that beneficiaries can learn about the significance of those plants. The EA also discusses mitigation measures received from the State of Hawai'i, Department of Land and Natural Resources, Division of Forestry and Wildlife with regard to State-listed and endemic species. The project will implement the recommended mitigation measures where feasible. The archaeological studies also included several mitigation strategies, including burial treatment, preservation, data recovery, and monitoring. There are several important sites within the MPD area that will be preserved onsite and that will feature interpretive signage so that their significance can be celebrated and shared with the community. All the archaeological surveys and mitigation plans have been reviewed and accepted by the SHPD. Based on the significance criteria analysis supported by the technical studies included in the Draft EA, the Planning Department anticipated that the project would result in a Finding of No Significant Impact (FONSI) and therefore, the Draft EA was published with an "Anticipated Finding of No Significant Impact" (AFNSI) in the Environmental Review Program's Environmental Notice on March 8, 2024.

The Draft EA was revised to incorporate the comments received during the 30-day public review period and was submitted to the Planning Department for review as a Final EA. Based on the significance criteria analysis, the Planning Department determined that the project can qualify for a FONSI determination, and as such, preparation of an EIS is not required.

It is also noted that a Final EA (FONSI) was published in April 2019 for the previous iteration of the MPD, which included larger commercial components and fewer residential units (hereinafter referred to as the "2019 Final EA"). The results of the technical studies and the significance criteria analysis for the current iteration of the MPD (2024 Final EA) do not significantly differ from the 2019 Final EA.

**Comment No. 7:**

<https://www.westhawaii.com/2023/09/28/hawaii-news/lawsuit-filed-against-hawaiicounty/https://earthjustice.org/press/2023/earthjustice-files-lawsuit-to-clean-up-kealakehewastewater-treatment-plant-sewage>

**Response:** Thank you for providing this article. LT is aware of this issue.

**Comment No. 8:**

*Will this proposed action significantly affect the quality of the human environment (40 CFR 1508.14)?*

*For example, will it significantly alter or destroy valuable wetlands, important farmlands, cultural resources, or threatened and endangered species? Will it affect social values, water quality, fish and wildlife habitats, or wilderness and scenic areas?) Reread the Queens' mission statement. Do the EIS.*

**Response:** The EA for the MPD is being prepared pursuant to Chapter 343, HRS. The Code of Federal Regulations (CFR), Title 40 is applicable to Federal actions being assessed under the National Environmental Policy Act (NEPA) and is not applicable to the MPD. Nevertheless, as discussed above, various technical studies were prepared to determine whether or not the proposed action may have a significant impact on the environmental and/or socio-economic conditions of the area, and, where appropriate, recommended mitigative strategies to avoid or manage impacts so that they would not be substantial. It is noted that the project site does not have any wetlands, Important Agricultural Lands, or existing agricultural operations and measures have been developed to mitigate or otherwise manage impacts to endangered species, historic and cultural sites, and infrastructure demands. Based on the significance criteria analysis supported by the technical studies, the Draft EA with an AFNSI determination was published in March 2024. After the 30-day comment period for the Draft EA, the Final EA for the project was submitted to the Planning Department, and the Department has determined that the project can qualify for a FONSI and therefore an EIS is not required.

**Comment No. 9:**

*There is no water for these absurd projects for the wealthy, historical sites will be demolished in their plans and on and on. They are content with more money, raping of the land and her keiki in all forms, drilling deeper and deeper in waters, through pohaku which should never be done. The disrespect show to our kupuna in all forms is shameful. We will not allow it to happen.*

**Response:** LT currently has sufficient available water credits that may be used to service the calculated demand generated by the MPD under the Keahuolū Lands Water Resources Development Agreement and the Makalapua Business Center Water Commitment with the Department of Water Supply (DWS). It should be noted that although LT has enough water credits to accommodate the MPD at this time, LT's other planned projects in Kona are in various planning stages and will also require water credits. As such, LT is in the process of developing a new regional water source which is intended to be dedicated to the County once completed. In addition to meeting water needs for LT's other planned projects in Kona, this new water source would provide water for the County's future water needs in the Kona region. Regarding potential impacts to archaeological resources, all the archaeological surveys and mitigation plans have been reviewed and accepted by the SHPD. The mitigation measures include burial treatment, archaeological preservation, data recovery, and archaeological monitoring during construction.

As the MPD site is part of LT's endowment, and the development of this project will provide sustainable income for LT to fund its program offerings and operations, LT maintains that this project is in alignment with the Queen's Deed of Trust and thus, LT's mission to support Hawai'i's most vulnerable youth.

**Comment No. 10:**

*We have an amazing Queen, Queen Liliuokalani that still leads us, one of her most used statements; E Onipa'a Ka'imi Na'auao (Be steadfast in the seeking of knowledge). We stand with Na Iwi Kupuna to assure that these lands will not be made into hotels/condos for the rich as we have one of the highest native populations homeless, are now the 6th highest prostitution of our children (the average age now desired by these pedophiles is 4 yrs old and 16 yrs. old. Our airports (which is also on the Queens' lands for her keiki,) are expanding for the private jets and the military which is where the sex trafficking can prosper. There is no accountability for the wealthy and military as more and more children go missing, in fact they want to now build them hotels and put more Hawaiians on the streets, and a place for sex trafficking to prosper.*

**Response:** LT is aware of and advocates to improve the systems and conditions that lead to a disproportionate number of Native Hawaiian youth in distress.

**Comment No. 11:**

*We as a people. a strong lahui, cultural and indigenous practitioners, kiaj, na ohana will stop the raping our our earth as we stay as stewards for the land, the waters, our keiki, our ohana. It is your due diligence to do a EIS.*

**Response:** As previously mentioned, based on the significance criteria analysis supported by the technical studies, the Draft EA with an AFONSI determination was published in March 2024. After the 30-day comment period for the Draft EA, the Final EA for the project was submitted to the Planning Department, and the Department has determined that the project can qualify for a FONSI and therefore an EIS is not required.

We appreciate your input and will include a copy of your letter along with this response letter in the Final EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uoklani Trust  
Keith Uemura, Park Engineering, Inc.

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**From:** Krysel Carmelo <[krysel22c@gmail.com](mailto:krysel22c@gmail.com)>  
**Sent:** Monday, April 8, 2024 4:27 PM  
**To:** [besmeralda@onipaa.org](mailto:besmeralda@onipaa.org); [planning@hawaiiicounty.gov](mailto:planning@hawaiiicounty.gov); General eMail  
<[planning@munekiyohiraga.com](mailto:planning@munekiyohiraga.com)>  
**Subject:** Makalapua Project District

Aloha,

My name is Krysel Kaiwi and I am a local who grew up in Kailua-Kona.

QLCC mission statement states, Liliuokalani Trust provides opportunities for Hawaiian keiki to realize their greatest potential, joyful, and prosperous lives, while contributing positively to their families, communities, and the world. This land is for Hawaiian na keiki and destitute na keike.

As a mother to an almost 1-yr old, and expecting one another later this year, I truly love my children with every fiber of my being and work hard to preserve papahonua for them and continue to teach them the importance of customary traditional and cultural practices that start with hanau, Kona Field System, surfing (to name just a few) for our keiki and future generations from makai to mauka.

This proposed "Makalapua Project District" is rich in historical places and should be used as a mala to teach na keiki our customary practices that our Queen would want to see today. To make our keiki self-sustainable leaders in our thriving communities. This land is a (SMA) Special Management Area) and in a Historical District. It needs an EIS (Environmental Impact Statement) because the EA was not truthful. Hawaii has lost more species than any other state, which is one reason why it's been dubbed the extinction capital of the world. We now have the 6th highest rate of children be taken for the sex industry.

Environmental impact. Will this proposed action significantly affect the quality of the human environment ([40 CFR 1508.14](#))? For example, will it significantly alter or destroy valuable wetlands, important farmlands, cultural resources, or threatened and endangered species? Will it affect social values, water quality, fish and wildlife habitats, or wilderness and scenic areas?)

Please Reread the Queens' mission statement. Do the EIS.

Thank you for your time.

Sincerely, Krysel Kaiwi

October 1, 2024

Via email: [krysel22c@gmail.com](mailto:krysel22c@gmail.com)

Krysel Kaiwi  
Kailua-Kona

SUBJECT: Draft Environmental Assessment for the Proposed Makalapua Project District Project; Kailua-Kona, County of Hawai'i, Hawai'i

Dear Ms. Kaiwi:

Thank you for your email dated April 8, 2024 providing comments on the Draft Environmental Assessment (EA) for the Proposed Makalapua Project District (MPD) Project. On behalf of the Lili'uokalani Trust (LT), we offer the following information in response to the comments received:

**Comment No. 1:**

*QLCC mission statement states, Liliuokalani Trust provides opportunities for Hawaiian keiki to realize their greatest potential, joyful, and prosperous lives, while contributing positively to their families, communities, and the world. This land is for Hawaiian na keiki and destitute na keike.*

**Response:** Mahalo for your comment and acknowledgement of the mission of LT.

**Comment No. 2:**

*As a mother to an almost 1-yr old, and expecting one another later this year, I truly love my children with every fiber of my being and work hard to preserve papahonua for them and continue to teach them the importance of customary traditional and cultural practices that start with hanau, Kona Field System, surfing (to name just a few) for our keiki and future generations from makai to mauka.*

**Response:** We appreciate your mana'o and efforts to pass on traditional culture-based knowledge to your 'ohana.



**Comment No. 3:**

*This proposed “Makalapua Project District” is rich in historical places and should be used as a mala to teach na keiki our customary practices that our Queen would want to see today. To make our keiki self-sustainable leaders in our thriving communities.*

**Response:** We acknowledge your comment and note that LT provides rich, culture-based learning programs at all its kīpuka (locations) throughout the state. The MPD site is part of LT’s endowment, and the development of this project will provide sustainable income for LT to fund its program offerings and operations statewide in perpetuity.

**Comment No. 4:**

*This land is a (SMA) Special Management Area) and in a Historical District. It needs an EIS (Environmental Impact Statement) because the EA was not truthful. Hawaii has lost more species than any other state, which is one reason why it’s been dubbed the extinction capital of the world. We now have the 6th highest rate of children be taken for the sex industry.*

**Response:** We acknowledge your comment that the MPD site is located within the Special Management Area (SMA). LT will submit an SMA Use Permit application to the Planning Department for review and processing after completion of the environmental review process. With regard to the MPD being within a Historical District, we note that the County of Hawai’i does not have Historic District zoning designations or overlay districts. However, as further discussed below, in consultation with the State Historic Preservation Division (SHPD), various archaeological studies and mitigation measures have been completed for the MPD site to mitigate potential impacts on significant archaeological features.

The EA was prepared truthfully and in accordance with State standards and regulations. It was determined that an Environmental Impact Statement (EIS) was not required for the project through the environmental review process. In the Chapter 343, Hawai’i Revised Statutes (HRS) environmental review process, an accepting agency for an EA (in this case, the County of Hawai’i Planning Department) determines whether or not a proposed action may have a significant impact on the environment using the “Significance Criteria” pursuant to Section 11-200.1-13, Hawaii Administrative Rules (HAR). Should it be determined that the proposed action would have a significant impact on the environment through the significance criteria analysis, preparation of an EIS would be required. To support the significance criteria analysis, various technical studies have been prepared by experts to analyze the project’s potential impacts on specific areas, including infrastructure, traffic, biological resources, and archaeological

resources and where applicable, included recommended mitigative strategies to avoid or manage impacts so that they would not be substantial. For example, the flora and fauna survey identified known endangered species within the project site and included recommended mitigation measures such as, out planting those known endangered species and including them in LT's program offerings so that beneficiaries can learn about the significance of those plants. The EA also discusses mitigation measures received from the State of Hawai'i, Department of Land and Natural Resources, Division of Forestry and Wildlife with regard to State-listed and endemic species. The project will implement the recommended mitigation measures where feasible. The archaeological studies also included several mitigation strategies, including burial treatment, preservation, data recovery, and monitoring. There are several important sites within the MPD area that will be preserved onsite and that will feature interpretive signage so that their significance can be celebrated and shared with the community. All the archaeological surveys and mitigation plans have been reviewed and accepted by the SHPD. Based on the significance criteria analysis supported by the technical studies included in the Draft EA, the Planning Department anticipated that the project would result in a Finding of No Significant Impact (FONSI) and therefore, the Draft EA was published with an "Anticipated Finding of No Significant Impact" (AFONSI) in the Environmental Review Program's Environmental Notice on March 8, 2024.

The Draft EA was revised to incorporate the comments received during the 30-day public review period and was submitted to the Planning Department for review as a Final EA. Based on the significance criteria analysis, the Planning Department determined that the project can qualify for a FONSI determination, and as such, preparation of an EIS is not required.

It is also noted that a Final EA (FONSI) was published in April 2019 for the previous iteration of the MPD, which included larger commercial components and fewer residential units (hereinafter referred to as the "2019 Final EA"). The results of the technical studies and the significance criteria analysis for the current iteration of the MPD (2024 Final EA) do not significantly differ from the 2019 Final EA (FONSI).

We note your comment regarding extinctions of species in Hawai'i. While the Statewide protection of endangered or threatened species is outside of the scope of this project, a Flora and Fauna Survey was prepared for the MPD site and appropriate mitigation measures will be implemented to protect endangered or threatened species that have potential to exist on or in the vicinity of the project area.

LT is aware of the state of issues affecting Hawai'i's youth, particularly the disproportional distress indicators experienced in Native Hawaiian

communities. In realizing our mission, LT aims to provide opportunities for kamali'i to thrive and be provided with caring, supportive environments.

**Comment No. 5:**

*Environmental impact. Will this proposed action significantly affect the quality of the human environment (40 CFR 1508.14)? For example, will it significantly alter or destroy valuable wetlands, important farmlands, cultural resources, or threatened and endangered species? Will it affect social values, water quality, fish and wildlife habitats, or wilderness and scenic areas?) Please Reread the Queens' mission statement. Do the EIS.*

**Response:** The EA for the MPD is being prepared pursuant to Chapter 343, HRS. The Code of Federal Regulations (CFR), Title 40 is applicable to Federal actions being assessed under the National Environmental Policy Act (NEPA) and is not applicable to the MPD. Nevertheless, as discussed above, various technical studies were prepared to determine whether or not the proposed action may have a significant impact on the environmental and/or socio-economic conditions of the area, and, where appropriate, recommended mitigative strategies to avoid or manage impacts so that they would not be substantial. It is noted that the project site does not have any wetlands, Important Agricultural Lands, or existing agricultural operations and measures have been developed to mitigate or otherwise manage impacts to endangered species, historic and cultural sites, and infrastructure demands.

Based on the significance criteria analysis supported by the technical studies, the Draft EA with an AFONSI determination was published in March 2024. After the 30-day comment period for the Draft EA, the Final EA for the project was submitted to the Planning Department, and the Department has determined that the project can qualify for a FONSI and therefore an EIS is not required. As the MPD site is part of LT's endowment, and the development of this project will provide sustainable income for LT to fund its program offerings and operations, LT maintains that this project is in alignment with the Queen's Deed of Trust and thus, LT's mission to support Hawai'i's most vulnerable youth.

We appreciate your input and will include a copy of your letter along with this response letter in the Final EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uoklani Trust

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**From:** La'akea Washburn <[laakeawashburn@gmail.com](mailto:laakeawashburn@gmail.com)>  
**Sent:** Monday, April 8, 2024 12:14 PM  
**To:** [planning@hawaiicounty.gov](mailto:planning@hawaiicounty.gov); [besmeralda@onipaa.org](mailto:besmeralda@onipaa.org); General eMail <[planning@munekiyohiraga.com](mailto:planning@munekiyohiraga.com)>  
**Cc:** [mammanaclare@outlook.com](mailto:mammanaclare@outlook.com)  
**Subject:** Makalapua Project District

Aloha,

My name is La'akea Washburn and I was born and raised in Kainaliu, Kona.

**QLCC mission statement states, *Liliuokalani Trust provides opportunities for Hawaiian keiki to realize their greatest potential, joyful, and prosperous lives, while contributing positively to their families, communities, and the world. This land is for Hawaiian na keiki and destitute na keike.***

I love my children and work to preserve papa honua for them and continue to teach them the importance of customary traditional and cultural practices that start with hānau, Kona Field System, surfing (to name just a few) for our keiki and future generations from makai to mauka.

This proposed "Makalapua Project District" is rich in historical places and ***should be used as a mala to teach na keiki our customary practices that our Queen would want to see today. To make our keiki self-sustainable leaders in our thriving communities.*** How is this development fostering the well being of our children and Hawaiian culture? In my opinion, it seems to be fostering modernization and consumerism. This land is a SMA (Special Management Area) and in a Historical District. It needs an EIS (Environmental Impact Statement) because the EA was not truthful. Hawai'i has lost more species than any other state, which is one reason why it's been dubbed the extinction capital of the world. We now have the 6<sup>th</sup> highest rate of children taken for the sex industry.

*Environmental impact: Will this proposed action significantly affect the quality of the human environment ([40 CFR 1508.14](#))? For example, will it significantly alter or destroy valuable wetlands, important farmlands, cultural resources, or threatened and endangered species? Will it affect social values, water quality, fish and wildlife habitats, or wilderness and scenic areas?)*

Reread the Queen's mission statement. Do the EIS.

Mahalo for your time,

La'akea Washburn

October 1, 2024

**Via email:** [laakeawashburn@gmail.com](mailto:laakeawashburn@gmail.com)

La'akea Washburn  
Kainaliu-Kona

**SUBJECT:** Draft Environmental Assessment for the Proposed Makalapua Project District Project; Kailua-Kona, County of Hawai'i, Hawai'i

Dear Mr. Washburn:

Thank you for your email dated April 8, 2024 providing comments on the Draft Environmental Assessment (EA) for the Proposed Makalapua Project District (MPD) Project. On behalf of the Lili'uokalani Trust (LT), we offer the following information in response to the comments received:

**Comment No. 1:**

*QLCC mission statement states, Liliuokalani Trust provides opportunities for Hawaiian keiki to realize their greatest potential, joyful, and prosperous lives, while contributing positively to their families, communities, and the world. This land is for Hawaiian na keiki and destitute na keike.*

**Response:** Mahalo for your comment and acknowledgment of the mission of LT.

**Comment No. 2:**

*I love my children and work to preserve papa honua for them and continue to teach them the importance of customary traditional and cultural practices that start with hānau, Kona Field System, surfing (to name just a few) for our keiki and future generations from makai to mauka.*

**Response:** We appreciate your mana'o and efforts to pass on traditional culture-based knowledge to your 'ohana.

**Comment No. 3:**

*This proposed "Makalapua Project District" is rich in historical places and should be used as a mala to teach na keiki our customary practices that our Queen would want to see today. To make our keiki self-sustainable leaders in our thriving communities.*

**Response:** We acknowledge your comment and note that LT provides rich, culture-based learning programs at all its kīpuka (locations) throughout the state. The MPD site is part of LT's endowment, and the development of this project will provide sustainable income for LT to fund its program offerings and operations statewide in perpetuity.

**Comment No. 4:**

*How is this development fostering the well being of our children and Hawaiian culture? In my opinion, it seems to be fostering modernization and consumerism. This land is a SMA (Special Management Area) and in a Historical District. It needs an EIS (Environmental Impact Statement) because the EA was not truthful. Hawai'i has lost more species than any other state, which is one reason why it's been dubbed the extinction capital of the world. We now have the 6th highest rate of children taken for the sex industry.*

**Response:** We acknowledge your comment and concur that the MPD site is located within the Special Management Area (SMA). LT will submit an SMA Use Permit application to the Planning Department for review and processing after completion of the environmental review process. With regard to the MPD being within a Historical District, we note that the County of Hawai'i does not have Historic District zoning designations or overlay districts. However, as further discussed below, in consultation with the State Historic Preservation Division (SHPD), various archaeological studies and mitigation measures have been completed for the MPD site to mitigate potential impacts on significant archaeological features.

The EA was prepared truthfully and in accordance with State standards and regulations. It was determined that an Environmental Impact Statement (EIS) was not required for the project through the environmental review process. In the Chapter 343, Hawai'i Revised Statutes (HRS) environmental review process, an accepting agency for an EA (in this case, the County of Hawai'i Planning Department) determines whether or not a proposed action may have a significant impact on the environment using the "Significance Criteria" pursuant to Section 11-200.1-13, Hawaii Administrative Rules (HAR). Should it be determined that the proposed action would have a significant impact on the environment through the significance criteria analysis, preparation of an EIS would be required. To support the

significance criteria analysis, various technical studies have been prepared by experts to analyze the project's potential impacts on specific areas, including infrastructure, traffic, biological resources, and archaeological resources and where applicable, included recommended mitigative strategies to avoid or manage impacts so that they would not be substantial. For example, the flora and fauna survey identified known endangered species within the project site and included recommended mitigation measures such as, out planting those known endangered species and including them in LT's program offerings so that beneficiaries can learn about the significance of those plants. The EA also discusses mitigation measures received from the State of Hawai'i, Department of Land and Natural Resources, Division of Forestry and Wildlife with regard to State-listed and endemic species. The project will implement the recommended mitigation measures where feasible. The archaeological studies also included several mitigation strategies, including burial treatment, preservation, data recovery, and monitoring. There are several important sites within the MPD area that will be preserved onsite and that will feature interpretive signage so that their significance can be celebrated and shared with the community. All the archaeological surveys and mitigation plans have been reviewed and accepted by the SHPD. Based on the significance criteria analysis supported by the technical studies included in the Draft EA, the Planning Department anticipated that the project would result in a Finding of No Significant Impact (FONSI) and therefore, the Draft EA was published with an "Anticipated Finding of No Significant Impact" (AFNSI) in the Environmental Review Program's Environmental Notice on March 8, 2024.

The Draft EA was revised to incorporate the comments received during the 30-day public review period and was submitted to the Planning Department for review as a Final EA. Based on the significance criteria analysis, the Planning Department determined that the project can qualify for a FONSI determination, and as such, preparation of an EIS is not required.

It is also noted that a Final EA (FONSI) was published in April 2019 for the previous iteration of the MPD, which included larger commercial components and fewer residential units (hereinafter referred to as the "2019 Final EA"). The results of the technical studies and the significance criteria analysis for the current iteration of the MPD (2024 Final EA) do not significantly differ from the 2019 Final EA (FONSI).

We note your comment regarding extinctions of species in Hawai'i. While the Statewide protection of endangered or threatened species is outside of the scope of this project, a Flora and Fauna Survey was prepared for the MPD site and appropriate mitigation measures will be implemented to protect endangered or threatened species that have potential to existing on or in the vicinity of the project area.



LT is aware of the state of issues affecting Hawai'i's youth, particularly the disproportional distress indicators experienced in Native Hawaiian communities. In realizing our mission, LT aims to provide opportunities for kamali'i to thrive and be provided with caring, supportive environments.

**Comment No. 5:**

*Environmental impact. Will this proposed action significantly affect the quality of the human environment (40 CFR 1508.14)? For example, will it significantly alter or destroy valuable wetlands, important farmlands, cultural resources, or threatened and endangered species? Will it affect social values, water quality, fish and wildlife habitats, or wilderness and scenic areas?)*

*Reread the Queens' mission statement. Do the EIS.*

**Response:** The EA for the MPD is being prepared pursuant to Chapter 343, HRS. The Code of Federal Regulations (CFR), Title 40 is applicable to Federal actions being assessed under the National Environmental Policy Act (NEPA) and is not applicable to the MPD. Nevertheless, as discussed above, various technical studies were prepared to determine whether or not the proposed action may have a significant impact on the environmental and/or socio-economic conditions of the area, and, where appropriate, recommended mitigative strategies to avoid or manage impacts so that they would not be substantial. It is noted that the project site does not have any wetlands, Important Agricultural Lands, or existing agricultural operations and measures have been developed to mitigate or otherwise manage impacts to endangered species, historic and cultural sites, and infrastructure demands. Based on the significance criteria analysis supported by the technical studies, the Draft EA with an AFNSI determination was published in March 2024. After the 30-day comment period for the Draft EA, the Final EA for the project was submitted to the Planning Department, and the Department has determined that the project can qualify for a FONSI and therefore an EIS is not required. As the MPD site is part of LT's endowment, and the development of this project will provide sustainable income for LT to fund its program offerings and operations, LT maintains that this project is in alignment with the Queen's Deed of Trust and thus, LT's mission to support Hawai'i's most vulnerable youth.

La'akea Washburn  
October 1, 2024  
Page 5

We appreciate your input and will include a copy of your letter along with this response letter in the Final EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uoklani Trust

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**DeVera, Ashley**

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**From:** Loke Aloua <ruthaloua@gmail.com>  
**Sent:** Sunday, April 7, 2024 8:34 PM  
**To:** Planning Internet Mail  
**Cc:** clare loprinzi  
**Subject:** Makalapua Project District Comments  
**Attachments:** CommentsFinal\_MakalapuaProjectDistrict.pdf

Hello,

I am submitting comments on the Publication of the Draft Environmental Assessment (DEA) and Anticipated Finding of No Significant Impact (AFONSI), Project: Makalapua Project District, TMK:3) 7-4-008:002 (por.), (3) 7-4-010:009-010, (3) 7-4-025:001-003, 005, 015 and 021 Keahuolū, North Kona, Island of Hawai'i. My comments are attached as a pdf to this email.

I look forward to receiving follow-up.

Ke Aloha 'Āina,

Loke Aloua

--

**Cocoa cracka butta morning, hāloa till high noon, dry fish poi will meet you.**

Aloha,

My name is Loke Aloua and I am submitting comments for the Publication of the Draft Environmental Assessment (DEA) and Anticipated Finding of No Significant Impact (AFONSI), Applicant: Lili'uokalani Trust, Project: Makalapua Project District, TMK: (3) 7-4-008:002 (por.), (3) 7-4-010:009-010, (3) 7-4-025:001-003, 005, 015 and 021 Keahuolū, North Kona, Island of Hawai'i.

Though the DEA concludes AFONSI there are major components and claims requiring further analysis to provide a more robust analysis of the project's impacts. The concerns that I have for this project are broad. Some comments focus on public trust resources (e.g., marine waters and water resources) that are protected by the State of Hawai'i Constitution that should be further analyzed.<sup>1</sup> Others question the project's appropriateness, freshwater requirements versus availability, safety risks, socioeconomic housing conclusions, and unsubstantiated claims of no adverse impacts on the Kona Community Hospital.

The concerns and questions that I have submitted should help to provide a more robust analysis and insight into the potential environmental impacts of the project, its hazards, and beneficiaries.

Ke Aloha 'Āina,  
Loke Aloua  
PO Box 584, Kailua-Kona, HI 96745

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<sup>1</sup> Section 1. For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resources, including land, water, air, minerals and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State. All public natural resources are held in trust by the State for the benefit of the people. [Add Const Con 1978 and election Nov 7, 1978]

Section 6. The State shall have the power to manage and control the marine, seabed and other resources located within the boundaries of the State, including the archipelagic waters of the State, and reserves to itself all such rights outside state boundaries not specifically limited by federal or international law.

All fisheries in the sea waters of the State not included in any fish pond, artificial enclosure or state-licensed mariculture operation shall be free to the public, subject to vested rights and the right of the State to regulate the same; provided that mariculture operations shall be established under guidelines enacted by the legislature, which shall protect the public's use and enjoyment of the reefs. The State may condemn such vested rights for public use. [Ren and am Const Con 1978 and election Nov 7, 1978]

Section 7. The State has an obligation to protect, control and regulate the use of Hawaii's water resources for the benefit of its people.

The legislature shall provide for a water resources agency which, as provided by law, shall set overall water conservation, quality and use policies; define beneficial and reasonable uses; protect ground and surface water resources, watersheds and natural stream environments; establish criteria for water use priorities while assuring appurtenant rights and existing correlative and riparian uses and establish procedures for regulating all uses of Hawaii's water resources. [Add Const Con 1978 and election Nov 7, 1978]

## Deed Of Trust

The Lili‘uokalani Trust is one of the few trusts that exists which plays a crucial role in creating spaces where Native Hawaiians should be able to thrive. The land holdings and resources of the Trust are assets that belong to its beneficiaries. The Deed of Trust states that, “*all the property of the Trust Estate, both principal and income...shall be used by the Trustees for the benefit of orphan and other destitute children in the Hawaiian Islands, the preference given to Hawaiian children of pure or part- aboriginal blood (Page 4).*” The direction and priorities of the Queen Lil‘uokalani Trust in Kailua-Kona has been a growing issue and concern for those of our Native Hawaiian community for decades. Folks have long called for accountability and transparency from the Trust. These calls have gone unanswered as decisions about our ali‘i lands are directed towards economic development and sold off outweighing the needs, interests, and wants of the beneficiaries. Outside of Kona, kūpunu like Aunty Gwen Kim and Aunty Maxine Kahaulelio have long fought for the Trust to remain steadfast in its mission to benefit orphan and destitute children.

The DEA claims that “proposed Makalapua Project District is intended to create long-term value for the Trust and provide financial support for its programs for future generations (Page 4).” Revenues generated by the project are described in Appendix A: Economic and Fiscal Impact Analysis. Total project net impact will be more than \$39 million. The DEA does not describe how these funds will be used in programs for future generations. I am curious to what type of programs the trust will fund with this \$39 million that will benefit orphan and destitute children. The DEA does not describe what these programs are and how they are in fulfillment with the purpose of the trust and have considered community input in the plans formation.

Native Hawaiians in Kona have longed for shoreline access for they and their families that are within the trust Kona land holdings.

Native Hawaiians have craved business spaces offered at low-income rates to promote, establish, and grow their businesses.

Native Hawaiians have wanted greater protection and care of the ancestral sites and anchialine pools in shoreline public access areas overseen by LT.

Native Hawaiians are wanting the ali‘i lands to remain within the trust and be directed towards ahupua‘a scaled restoration that mimics ancestral knowledge of the old ones.

This proposed development actually conflicts with the desires of our Native Hawaiian community for this area. I am requesting community consultation records for the Makalapua Project District and program plans describing how revenues generated by this project will serve the beneficiaries. I also have the following questions:

*What consultation was done with beneficiaries to guide the goals of this project?*

*Where can beneficiaries locate consultation records that indicate this is a community desired and appropriate project?*

*What programs will be financed by the project revenues?*

*How do these programs serve beneficiaries?*

*What are the direct benefits of the Makalapua Project District to beneficiaries?*

*How many destitute and orphan children, including those of Native Hawaiian descent will benefit from this project?*

*What were the metrics used to determine benefits to beneficiaries?*

*Who has the trust consulted in the sale of ali'i lands for the for sale units (which equates to 10 acres)?*

### **Project Lacks Necessary Water Credits**

Kona is one of the driest districts on the island. Development needs outpace and outmatch freshwater availability. It appears that the project lacks the necessary water credits for their projected water use. According to the DEA the “current estimate of available credits for LT is 78 units from MBC and 649 units from KLWRA” with these water credits “expressed in equivalent units based on a maximum day demand of 600 GPD (Page 9). This equates to a total of 727 water credits or 436,200 GPD. While average daily demand is 327,450 GPD - within the allotted water usage - the maximum daily usage is 491,175 GPD with 1,637,250 GPD for peak hour demand (Table 6-1). These latter two water predictions are well above the allotted water credits. The project lacks necessary water credits for the proposed development.

I have the following questions:

*How will the project secure necessary water credits for projected water use?*

*How is the project permissible when the maximum daily use and peak hour demand are above allotted water use?*

### **Environmental Impacts to Groundwater Dependent Species and Ecosystems Remains to Be Addressed**

While on the subject of freshwater the DEA fails to describe how projected water use for the 1,637,250 GPD will impact groundwater dependent species and ecosystems. Sustainable yield does not provide this analysis. Freshwater is crucial to the seasonal rotations of microorganisms who form the base of the food chain for Kona’s rich fisheries. These organisms then provide a food and nutrient base for our near- and deep-shore fisheries which correlates with native fish spawning, limu blooms, bird nesting, and whale birthing. While the project discusses water credits, water use, and transmission lines the DEA fails to assess environmental impacts to groundwater dependent species and ecosystems. Furthermore, the DEA states anchialine pools were destroyed with the development when the Old Kona Airport was developed (Page 29). Such statements do not eliminate the possibility that anchialine pools outside of the project district will not be impacted. Anchialine pools receive inflow from both the ocean and the groundwater. Thus, groundwater withdrawal has impacts to anchialine pools beyond those directly within the boundaries defined in the DEA. I have the following questions:

*What are the environmental impacts of groundwater withdrawal on groundwater dependent species and ecosystems?*

*What are the environmental impacts of groundwater withdrawal on seasonal blooms, spawning, and nesting of native and endangered species?*

*What are the impacts to anchialine pools and their groundwater dependent species outside of the project district?*

## Environmental Impacts of New Regional Water Source Remains to be Addressed

The DEA states that “LT is in the process of developing a new regional water source” (Page 77; Appendix B, Page 10). This project is part of a bigger program of development by LT and the new water source is not described beyond mentioning. *Analysis for this potential new water source should be addressed in this EA.*

## Tsunami Evacuation Routes and Traffic: Project Lacks Necessary Infrastructure Posing a Threat to Human Safety

The project site is located directly north of the tsunami evacuation route. Concerns raised by the County of Police dealt with impacts to evacuation routes and traffic flow. Police Chief Benjamin T. Moszkowicz (September 25, 2023) commented, “One noted concern is how this project will affect traffic flow, and if evacuation routes are sufficient, as this area borders the tsunami evacuation zone.” Similarly, the Hawaii Department of Transportation also commented concluding that it “anticipates a potential adverse impact to Queen Kaahumanu Highway” (October 3, 2023). At full build-out the project is estimated to add at least 1,087 vehicles to the roadway. Proposed mitigative measures suggest potential realignments and extensions which reinforce the current grid network that will not alleviate traffic flow or create alternative emergency routes. **These roadway improvements in the DEA are inadequate and do not provide necessary safety measures for tsunami evacuations.**

The proposed project will add to the density of the area which is located directly across from the main soccer field, outdoor basketball courts, gymnasium, aquatic center, baseball fields, our primary children's playground, tennis courts, walking path and county beach park. We can have soccer games, softball tournaments, aquatic trainings, multiple birthday parties, snorkelers, surf schools, walkers exercising in this area and large gatherings (e.g., concerts, county fairs). The immediate evacuation route is Makala Boulevard leading to Queen Ka’ahumanu Highway. This area has already been assessed as a Moderate Hazard area with limited access routes (Hawa’i Island Hazard Assessment 2015). Furthermore, the DEA states that (Page 73):

roadway improvements recommended below are currently not funded but are anticipated to be required as a result of both projected background development traffic and traffic generated by the project.

Widen Queen Ka’ahumanu Highway from two (2) through lanes to three (3) through lanes in the northbound direction from the Makala Boulevard intersection to the Palani Road intersection.  
Extend the southbound widening to Palani Road.

Extend the Kuakini Highway widening from one (1) through lane to two (2) through lanes in the southbound direction from Kaiwi Street to Makala Boulevard.

Widen Kuakini Highway from three (3) through lanes to four (4) through lanes from Palani Road to Kaiwi Street.

**All of these roadway improvements are not funded though required as a result of traffic generated by the project.** The DEA states, “The LOS for the specified intersections with the project with mitigation scenario is based on the assumption that the following improvements are implemented (Page 75).” The traffic impact analysis assumes these roadway improvements will be completed. There should be a second analysis adjusted to the planned and funded roadway improvements that consider tsunami and emergency evacuations.

Our families in Kona have limited open space to gather. The Old Kona Airport is a major community hub with a primary playground most of our families in Kailua access while tournaments are held on multiple fields with birthdays celebrated at the beach pavilions. Too, the shopping center, big box stores, bank, and fast-food restaurants employ a large majority of working class community members. Hundreds of people occupy this area throughout the day with peak usage on weekends, holidays, and summers. The roads that are used in the Kona Commons Shopping Center and Kona Industrial Area are already congested throughout the day under current conditions. The ability for individuals and families to evacuate to safety during emergency evacuations is a necessity. A traffic analysis of tsunami evacuation routes with added traffic remains to be addressed. I also have the following questions:

*What are the traffic impacts of added vehicles during tsunami or emergency evacuation?*

*What are traffic impacts of added vehicles during tsunami or emergency evacuation without the non-funded roadway improvements?*

*What are the traffic impacts of added vehicles without the non-funded roadway improvements?*

*When will the non-funded traffic improvements be completed?*

*How will the lack of the non-funded and roadway improvements impact traffic?*

*How will the lack of the non-funded roadway improvements impact tsunami and emergency evacuation?*

## **Wildfire Hazards and Evacuation Routes, Hazards, and Mitigations**

The DEA mentions and acknowledges the risks of the non-native vegetation and the ways in which the project development will reduce fire risk hazards by removing invasive vegetation (Page 50). While this may be true, the area of the proposed project has been determined to pose a high hazard because of dense structures with high ignition probability (Hawaii Wildlife Management Organization 2015). The proposed development will add to the density of structures located within this area therefore increasing the risk of a fire hazard. The risks of the added infrastructure on existing project density in relationship to surrounding fire probabilities have yet to be addressed. For instance, the potential impacts of Hawai'i Gas (located directly south neighboring this development) and the gas station located at the Kona International Market Place should be considered in the fire analysis. Too, the above ground utility lines providing power to the Kona Old Industrial Area pose an evacuation risk. While this might seem beyond the scope of this project, the project actually adds to the density of this area which is located directly along a tsunami evacuation route.



Part of what created the dangerous conditions in the Maui Lāhaina Wildfires (which are mentioned in the DEA) is the dense buildout of the shoreline area without the proper considerations for human safety and necessary evacuation routes. Gas stations exploded fuelling the intensity of the fire. The above ground utility lines fell or leaned onto roadways blocking vehicles and pedestrians from safely evacuating. This caused the system to become grid locked with bumper-to-bumper traffic and limited exit routes available for the number of vehicles in the area. The limited routes that were available actually led evacuees directly towards the fire with heavy reliance on the Honoapiʻilani Highway, which too was blocked by downed utility lines.

The Old Kona Airport is a major recreational area used by Kailua residents. Use of this area has increased with Kona's growing population. The only exit route from the Old Kona Airport is (1) to drive east heading through Makala Boulevard up to the Queen Kaʻahumanu Highway continuing upslope and (2) to drive south on Kuakini Street and head east Kaiwi Street to reach Queen Kaʻahumanu Highway. The utility lines on Kaiwi Street are above ground that if fallen or leaning forces evacuees in an emergency situation to utilize the Makala Boulevard exit. This would be the only available exit creating an evacuation hazard because the Makalapua Project District will become grid locked with bumper-to-bumper traffic (as seen in Maui). Traffic throughout the day along this main route already becomes locked with slow moving, bumper-to-bumper traffic. Fire evacuation routes for the added vehicles created by this proposed development should be assessed. Analyzing these scenarios are integral to assessing the project's impact on human health and safety. I have the following questions:

*How will increasing the density of structures in this area impact fire hazards?*

*How will these fire hazards be mitigated?*

*What are the evacuation routes available should there be a fire?*

*What are the viability of these evacuation routes?*

*How will additional traffic and vehicles created by this proposed development impact emergency evacuations?*

## **Medical Facilities Analysis Requires Evidence to Support Claims**

Kona residents have been waiting more than two decades for a new hospital to help meet the growing population needs. It is actually common knowledge for folks of this area to expect hours to a full-day waiting to be administered by Emergency Room staff and if needing a hospital bed transferred to Hilo or flown off-island due to the overloaded capacity of the Kona Community Hospital.

Shortcomings of the Kona Community Hospital was covered in February 2023 by Hawai'i News Now (<https://www.hawaiinewsnow.com/2023/02/24/underfunding-deferred-maintenance-threaten-key-infrastructure-hawaii-hospital/>) describing the dire situation facing the Kona Community Hospital. The facility is underfunded with failing infrastructure and needed upgrades with threats of closure due to these issues (<https://bigislandnow.com/2023/04/02/kona-community-hospital-at-risk-of-closure-due-to-outdated-utilities/>). Even with some of the appropriations secured by Hawai'i Legislatures the Kona Community Hospital remains overloaded

<https://bigislandnow.com/2022/12/27/the-big-islands-two-primary-hospitals-in-kona-and-hilo-continue-to-deal-with-overcapacity/>) in dire need of another facility.

The DEA states that, “the development of the Makalapua Project District is not anticipated to generate significant additional need for medical services in the West Hawai‘i region. Significant adverse impacts to medical facilities are not anticipated as a result of the proposed project (Page 60).” These statements are unsupported and should provide evidence for the basis of these claims. The existence of hospitals island wide is not sufficient evidence for this finding of no adverse impact. I have the following questions:

*What evidence is available to support the claim that the MPD will not generate additional need for medical services in the West Hawai‘i Region?*

*How will the proposed project impact the carrying capacity of the Kona Community Hospital in relation to the existing population?*

### **Affordable Housing Assessments Missing**

Discussions evaluating, describing, and assessing who can afford the housing units are missing. Information like income qualifications, % of AMI, an analysis of affordability for current population versus outside buyers, affordability to low income groups and low-moderate income groups are missing. Indeed, housing is a huge issue and need for our families. What is needed is housing that is truly “affordable” and within the financial means of our ‘ohana. The Hawai‘i County General Plan is described and lists needs for mixed housing for diverse socio-economic incomes, including low and low-moderate groups. While it is mentioned the applicability is not fully discussed nor evaluated. Reiterations of project assumed affordability to diverse incomes is directly applicable through Chapter 226-19 (Page 101). Yet, again there is no discussion or evidence that housing is made available to diverse socio-economic incomes is missing. If it is directly applicable then it should be described, analyzed, and assessed in relationship to Kona’s housing needs for its current population, not future. Thus, I have the following questions and would appreciate an analysis contextualizing how this housing project will respond to our current communities housing needs. I have the following questions:

*What is the expected income to qualify for the market units for sale and rent?*

*What is the expected income to qualify for the affordable units for sale and rent?*

*What percentage of area median income (AMI) should households earn to afford market units for sale and rent?*

*What percentage of area median income (AMI) should households earn to afford affordable units for sale and rent?*

*What percentage of Kona’s current population can afford the proposed market homes?*

*What percentage of Kona’s current population can afford the proposed market rentals?*

*What percentage of Kona’s current population can afford the proposed affordable housing for sale?*

*What percentage of Kona’s current population can afford the proposed affordable housing for rent?*

*What guidelines were used to create the affordable units for sale and rent?*

*What percentage of housing is available to low income groups?*

*What percentage of housing is available to low-moderate income groups?*

## **Sewage: DEA Fails to Describe Nutrient Loads and Environmental Impacts to Endangered Species, Marine Waters, and Traditional and Customary Practices**

Phase I and Phase II of the proposed project project peak wastewater flows will generate an additional .5606 MGD of sewage that will be treated at the Kealakehe Wastewater Treatment Plant (WWTP) which is a County owned facility. The DEA fails to describe how nutrient loads (e.g., phosphorous and nitrogen) will impact the groundwaters and marine waters.

Treated sewage from the Kealakehe WWTP discharges into a natural disposal pit located in a permeable lava field upslope from Honokōhau Harbor, which is on the Kona (west) side of Hawai'i Island. Treated sewage that discharges into the sewage pit enters the groundwater and flows into the nearshore ocean waters in and adjacent to the Honokōhau Boat Harbor, including Honokōhau Bay. This bay sits within the Kaloko-Honokōhau National Historical Park which provides critical habitat for native and endangered protected species like the ae'o (black necked stilt), 'ālae ke'oke'o (Hawaiian coot) and kohola (humpback whales). There is a fishtrap and two fishponds (Kaloko Fishpond and 'Aimakapā Fishpond) which are federally protected wetlands within the ahupua'a of Honokōhau and Kaloko. Both of these wetlands are directly north of the Kealakehe WWTP, the facility receiving sewage waste from the proposed project.

I am a traditional Native Hawaiian cultural practitioner who is a kia'i loko of Kaloko Fishpond. Surrounding urban development impacts ground-water quality and coral reefs that are a vital life source for healthy oceans. Healthy reefs foster life that reaches inland to the fishpond and back out again to the deep waters of the moana. Our 'ānae (native mullet) rely on clean, quality, flowing freshwaters to mature. Excessive nutrient loads from groundwater pollution creates harmful algae blooms, fish diseases, coral diseases, and more. For example, groundwater pollution creates harmful algae blooms that impact coral health and water quality. Declining coral health directly affects herbivorous fish populations and their health. These fish struggle with poor groundwater quality. This then hits our native birds who rely on the fingerlings. If the groundwater is sick the coral comes sick. If the coral comes sick the fish comes sick. If the fish comes sick then we come sick. Everything in the natural realm is connected. Kānaka fall in line with this realm, not above it.

Sewage produced from the proposed development will enter groundwater systems impacting these federal protected wetlands and endangered species which poses a threat to my traditional and customary practice. I am requesting an environmental impact statement to determine the scale of impact and proposed mitigation measures. I am also requesting evidence of a Ka Pa'akai Analysis that has determined this project will not have an impact on traditional and customary practices. I have the following questions:

*How will sewage impact groundwater quality?*

*How will sewage impact groundwater dependent species and ecosystems?*

*What are the projected nutrient loads created by the sewage?*

*What are the impacts of these projected nutrient loads (e.g., nitrogen and phosphorous) on near- and deep-shore ecosystems and species, including groundwater dependent ecosystems and species?*

October 1, 2024

**Via email: [ruthaloua@gmail.com](mailto:ruthaloua@gmail.com)**

Loke Aloua  
P.O. Box 584  
Kailua-Kona, Hawai'i 96745

**SUBJECT: Draft Environmental Assessment for the Proposed Makalapua Project District Project, Kailua-Kona, County of Hawai'i, Hawai'i**

Dear Ms. Aloua:

Thank you for your email dated April 7, 2024 providing comments on the Draft Environmental Assessment (EA) for the Proposed Makalapua Project District (MPD) Project. On behalf of the Lili'uokalani Trust (LT), we offer the following information in response to the comments received:

**Comment No. 1:**

*Though the DEA concludes AFONSI there are major components and claims requiring further analysis to provide a more robust analysis of the project's impacts. The concerns that I have for this project are broad. Some comments focus on public trust resources (e.g., marine waters and water resources) that are protected by the State of Hawai'i Constitution that should be further analyzed. Others question the project's appropriateness, freshwater requirements versus availability, safety risks, socioeconomic housing conclusions, and unsubstantiated claims of no adverse impacts on the Kona Community Hospital.*

*The concerns and questions that I have submitted should help to provide a more robust analysis and insight into the potential environmental impacts of the project, its hazards, and beneficiaries*

**Response:** Thank you for your comments. Our responses are provided below.

**Comment No. 2: Deed of Trust**

**Response:** Mahalo for your comment and acknowledgement of the Deed of Trust. As you mentioned, the MPD site is part of LT's endowment, and the development of this project will provide sustainable income for LT to fund its various programs and services for the most vulnerable Native Hawaiian children ages 0-26 statewide in perpetuity. These lands were left to the Trust by the Queen for the specific purpose of generating income to support the Trust's mission. Development projects such as this is an important part of a diversified portfolio to ensure the Trust is able to meet mission-focused spending commitments across generations. We note that LT publishes an annual report of its key accomplishments and spending that is accessible to the public. In addition, it also releases a quarterly external newsletter detailing current program activities.

The Deed of Trust empowers the Board of Trustees to make all decisions about the Trust portfolio to fund mission spending in perpetuity. LT regularly consults with its beneficiaries to ensure that their voice is heard in program planning and youth space design.

Regarding the Keahuolū shoreline, LT's trustees created a perpetual use restriction in 2013 on Halepa'ō to provide 'ohana-oriented shoreline and camping access for the Queen's beneficiaries. LT's Kona-based natural assets and operations team is charged with caring for the undeveloped conservation lands at Keahuolū including the shoreline, anchialine ponds, and significant historic and cultural sites. The proposed MPD will not impact these programs and uses.

**Comment No. 3: Project Lacks Necessary Water Credits**

**Response:** LT currently has sufficient available water credits that may be used to service the calculated demand generated by the MPD under the existing Keahuolū Lands Water Resources Development Agreement (KLWRA) and the Makalapua Business Center Water Commitment (MBCWC) with the Department of Water Supply (DWS). As was stated in the Infrastructure Report and the Draft EA, the estimated number of water credits needed for MPD is 717. LT currently has 727 credits available from the KLWRA and the MBCWC. Average daily demand is calculated based on land uses and parcel area or unit counts from DWS Water Systems Standards. Maximum day and peak hour demands are computed by multiplying the average daily demand by 1.5 and 5.0, respectively. The maximum day and peak hour demands are used simply for water system analysis purposes to size different components of the water system such as pipes, tanks, pumps, etc. One water credit is equivalent to 600 gallons per day of maximum day demand.

It should be clarified that although LT has enough water credits to accommodate the MPD at this time, LT's other planned projects in Kona are in various planning stages and will also require water credits. As such, LT is in the process of developing a new regional water source which is intended to be dedicated to the County once completed. In addition to meeting water needs for LT's other planned projects in Kona, this new water source would provide water for the County's future water needs in the Kona region. The well project is a regional infrastructure improvement and is separate and distinct from the MPD project and as such, impacts related to the proposed well project will be assessed in separate permitting applications and an EA.

**Comment No. 4: Environmental Impacts to Groundwater Dependent Species and Ecosystems Remains to Be Addressed**

**Response:** As stated, LT currently has sufficient water credits to service the demand that will be generated by the MPD project. The planned new regional water source is a separate project and is not part of the scope of the MPD project, and therefore its potential impacts to the Ground Dependent Ecosystems (GDEs) are not analyzed as part of the EA for the MPD.

It is noted that the U.S. National Park Service (NPS) Kaloko-Honokohau National Historic Park and the State of Hawai'i, Commission on Water Resource Management (CWRM) are using adaptive management to address, monitor, and mitigate impacts to GDEs. It is also noted that whereas the existing deep wells tap the high-level aquifer that contributes some portion of recharge to the basal aquifer; hence, having the potential to impact nearshore tidal zones by reducing basal discharge to the ocean, the new, proposed regional well (not part of the MPD) is attempting to utilize the underlying deep confined freshwater aquifer that is understood to be discharging into deep offshore waters, and thus is not anticipated to impact near shore tidal groundwater dependent ecosystems or deepwater offshore cultural practices.

**Comment No. 5: Environmental Impacts of New Regional Water Source Remains to be Addressed**

**Response:** As noted previously, LT currently has sufficient available water credits that may be used to service the calculated demand generated by the MPD under the KLWRA and the MBCWC with the DWS. However, LT is in the process of developing a new regional water source which is intended to be dedicated to the County once completed. In addition to meeting water needs for LT's planned projects in Kona other than the MPD, this new water source would provide water for the County's future water needs in the Kona region. The plan for this new water source is to drill a new well into the deep confined aquifer, a water source below the basal lens that currently does not have

any active production wells. In studying this water source, LT's consultant team reasonably believes drawing from this source would not impact coastal and nearshore environments as this source discharges further offshore. As this is a new well, LT is in the process of preparing well construction and pump installation permit applications to be submitted to the CWRM. As part of this permitting process, a Ka Pa'akai analysis has been conducted to assess what impacts, if any, the new well would have on traditional and customary Native Hawaiian practices. In addition, LT has been in consultation with both CWRM and the DWS on its well plans. The DWS has approved the location of the proposed well.

**Comment No. 6: *Tsunami Evacuation Routes and Traffic: Project Lacks Necessary Infrastructure Posing a Threat to Human Safety***

**Response:** We acknowledge your concerns regarding safety measures for tsunami evacuation areas. The proposed MPD is located outside of the tsunami evacuation area, however, as noted in your comment, areas makai of the project site are within the tsunami evacuation zone. Nonetheless, with the improvements/extensions proposed to existing Makala Boulevard and Kuakini Highway and new internal roadways within the MPD project, circulation within the area will be improved.

**Comment No. 7: *All of these roadway improvements are not funded though required as a result of traffic generated by the project.***

**Response:** The Traffic Impact Analysis Report (TIAR) prepared for the project provides recommended roadway improvements to address traffic generated by the project as well as other known projects in the area. As the recommended traffic improvements are not solely triggered by the MPD project but are also attributable to ambient growth and other known development projects in the region, LT would participate in a pro rata cost sharing program with other landowners and developers to the satisfaction of the State of Hawaii, Department of Transportation and the County of Hawaii, Department of Public Works.

**Comment No. 8: *Wildfire Hazards and Evacuation Routes, Hazards, and Mitigations***

**Response:** We acknowledge your comments regarding wildfire hazards. The MPD is an in-fill development within an existing urbanized area with infrastructure to respond to various hazards including wildfires. The project is within the service area for the Hawai'i County Fire Department. Directing growth to already urbanized areas is preferable to greenfield or sprawling development outside of service areas for emergency responders. One of the Kona Community Plan Development Plan's (KCDP) guiding principles is to "direct future growth patterns toward compact villages, preserving Kona's rural, diverse, and historical character". The MPD is located in the

corridor that the KCDP designates as a Regional Commercial Center (“Makaeo Village”), and is also immediately adjacent to another Regional Commercial Center, Kailua Village, under the KCDP. Therefore, the MPD is appropriately located for minimizing impacts to the public safety services in Kona.

As noted in the EA, the construction of the MPD will adhere to applicable fire codes and standards including installation of fire hydrants, fire suppression systems, and fire alarms as required per the type of construction. Adherence to these standards will be confirmed during the building permit review process. Furthermore, all utility lines within the MPD project are planned to be installed underground.

As previously noted, with the improvements/extensions proposed to existing Makala Boulevard and Kuakini Highway and new internal roadways within the MPD project, circulation within the area will be improved.

**Comment No. 9: Medical Facilities Analysis Requires Evidence to Support Claims**

**Response:** LT understands the issues faced by the Kona Community Hospital (KCH). The MPD project is not anticipated to be a significant population generator. Rather, the MPD and its residential component is meant to provide housing options for Hawai‘i Island residents already living or working in Kona. We understand that a large majority of residents working in Kona travel from other areas on the island. This project is meant to provide homes for those residents so that they would not need to commute as far. As such, it is not anticipated that there would be significant adverse strain on the capacity or facilities at KCH. In addition, the proposed commercial space within MPD would allow for provision of medical office spaces to support medical care for the community.

It is noted that the population of West Hawai‘i will continue to increase with or without this project. As a State-run community resource, it is acknowledged that there are needed improvements to the KCH which should be addressed by the appropriate agencies.

**Comment No. 10: Affordable Housing Assessments Missing**

**Response:** LT understands that housing affordability is a concern in West Hawai‘i, much like the rest of the state. As noted previously, the MPD is intended to provide housing for Hawai‘i Island residents already working or living in Kona. The unit types, density, and design features were intentionally selected in order to keep unit prices lower and attainable for Hawai‘i’s working class.



The project will comply with the County of Hawai'i's affordable housing requirements in accordance with Hawai'i County Code (HCC) Section 11-4, Affordable Housing Requirements, which would require earning at least 120 affordable housing credits for the 600 proposed residential units, or 20 percent, based on the current code. At this point, the exact method by which the project will satisfy the requirements of HCC, Section 11-4 has not yet been determined and will be developed in conjunction with the project's residential developer partners.

**Comment No. 11: Sewage: DEA Fails to Describe Nutrient Loads and Environmental Impacts to Endangered Species, Marine Waters, and Traditional and Customary Practices**

**Response:** The infrastructure Report prepared for the project and included in the EA states that the proposed onsite wastewater collection system will follow the proposed public roadway system and will be conveyed by gravity sewer lines to the existing Kealakehe Sewer Pump Station (SPS) or a new SPS to be constructed as part of this project. From the SPS, flows will be conveyed to the existing Kealakehe Wastewater Treatment Plant (WWTP). Based on discussions with the Department of Environmental Management (DEM), the Kealakehe WWTP has capacity to accept the flows generated by MPD. Treated wastewater from the WWTP is discharged to an infiltration trench on the mauka side of Queen Ka'ahumanu Highway. We note that LT is aware that the County is currently addressing legal issues regarding the need to obtain a National Pollutant Discharge Elimination System permit for these discharges. The project's sewer system will be designed to meet the requirements of the DEM in accordance with the "Wastewater System Design Standards, City and County of Honolulu", dated July 2017. The method of discharge of wastewater by the County's WWTP is beyond the scope of this EA and should be addressed by the DEM.

As part of the EA process, a Cultural Impact Assessment (CIA) was conducted, which included archival research as well as interviews with descendants of Keahuolū and others knowledgeable of the area, to determine what impacts, if any, the proposed development would have on known traditional and customary practices and resources at the project site. The work conducted in preparing the CIA followed the Ka Pa'akai analysis framework, however the framework was not clearly identified in the CIA report included in the Draft EA. Following publication of the Draft EA and in response to comments received, the CIA was amended to include a clearly identified Ka Pa'akai analysis. The amended CIA will be included and discussed in the Final EA for the project.

Loke Aloua  
October 1, 2024  
Page 7

We appreciate your input and will include a copy of your letter along with this response letter in the Final EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uoklani Trust  
Keith Uemura, Park Engineering, Inc.  
Claire Tsuha, Austin, Tsutsumi & Associates, Inc.

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**From:** Misha Kassel <[mkassel137@gmail.com](mailto:mkassel137@gmail.com)>

**Sent:** Friday, April 5, 2024 3:31 PM

**To:** [planning@hawaiicounty.gov](mailto:planning@hawaiicounty.gov); [besmeralda@onipaa.org](mailto:besmeralda@onipaa.org); General eMail <[planning@munekiyohiraga.com](mailto:planning@munekiyohiraga.com)>

**Subject:** Makalapua Project Distric

Aloha

My name is Misha Kassel.

QLCC mission statement states, Liliuokalani Trust provides opportunities for Hawaiian keiki to realize their greatest potential, joyful, and prosperous lives, while contributing positively to their families, communities, and the world. This land is for Hawaiian na keiki and destitute keiki.

I love my children and work to preserve papahonua for them and continue to teach them the importance of customary traditional and cultural practices that start with hanau, Kona Field System, taking care of the ocean for our keiki and future generations from makai to mauka. This proposed "Makalapua Project District" is rich in historical places and should be used as a mala to teach na keiki our customary practices that our Queen would want to see today. To make our keiki self-sustainable leaders in our thriving communities. This land is a (SMA) Special Management Area) and in a Historical District. It needs an EIS (Environmental

Impact Statement) because the EA was not truthful and inadequate due to the water needs for the project, question of how created sewage is going to be adequately treated.

Will this proposed action significantly affect the quality of the human environment (40 CFR 1508.14)? For example, will it significantly alter or destroy valuable wetlands, important farmlands, cultural resources, or threatened and endangered species? Will it affect social values, water quality, fish and wildlife habitats, or wilderness and scenic areas?) Reread the Queens' mission statement. Do the EIS.

Thank you for your time.

Misha Kassel

Emergency Medicine Physician at Kona Community Hospital and father of 3 young girls here in the community.



October 1, 2024

Via email: [lmkassel137@gmail.com](mailto:lmkassel137@gmail.com)

Misha Kassel  
Kailua-Kona

SUBJECT: Draft Environmental Assessment for the Proposed Makalapua Project District Project; Kailua-Kona, County of Hawai'i, Hawai'i

Dear Ms. Kassel:

Thank you for your email dated April 5, 2024 providing comments on the Draft Environmental Assessment (EA) for the Proposed Makalapua Project District (MPD) Project. On behalf of the Lili'uokalani Trust (LT), we offer the following information in response to the comments received:

**Comment No. 1:**

*QLCC mission statement states, Liliuokalani Trust provides opportunities for Hawaiian keiki to realize their greatest potential, joyful, and prosperous lives, while contributing positively to their families, communities, and the world. This land is for Hawaiian na keiki and destitute keiki.*

**Response:** Mahalo for your comment and acknowledgement of the mission of LT.

**Comment No. 2:**

*I love my children and work to preserve papahonua for them and continue to teach them the importance of customary traditional and cultural practices that start with hanau, Kona Field System, taking care of the ocean for our keiki and future generations from makai to mauka.*

**Response:** We appreciate your mana'o and efforts to pass on traditional culture-based knowledge to your 'ohana.

**Comment No. 3:**

*This proposed “Makalapua Project District” is rich in historical places and should be used as a mala to teach na keiki our customary practices that our Queen would want to see today. To make our keiki self-sustainable leaders in our thriving communities.*

**Response:** We acknowledge your comment and note that LT provides rich, culture-based learning programs at all its kīpuka (locations) throughout the state. The MPD site is part of LT’s endowment, and the development of this project will provide sustainable income for LT to fund its program offerings and operations statewide and perpetuity.

**Comment No. 4:**

*This land is a (SMA) Special Management Area) and in a Historical District. It needs an EIS (Environmental Impact Statement) because the EA was not truthful and inadequate due to the water needs for the project, question of how created sewage is going to be adequately treated.*

**Response:** We acknowledge your comment that the MPD site is located within the Special Management Area (SMA). LT will submit an SMA Use Permit application to the Planning Department for review and processing after completion of the environmental review process. With regard to the MPD being within a Historical District, we note that the County of Hawai‘i does not have Historic District zoning designations or overlay districts. However, as further discussed below, in consultation with the State Historic Preservation Division (SHPD), various archaeological studies and mitigation measures have been completed for the MPD site to mitigate potential impacts on significant archaeological features.

The EA was prepared truthfully and in accordance with State standards and regulations. It was determined that an Environmental Impact Statement (EIS) was not required for the project through the environmental review process. In the Chapter 343, Hawai‘i Revised Statutes (HRS) environmental review process, an accepting agency for an EA (in this case, the County of Hawai‘i Planning Department) determines whether or not a proposed action may have a significant impact on the environment using the “Significance Criteria” pursuant to Section 11-200.1-13, Hawaii Administrative Rules (HAR). Should it be determined that the proposed action would have a significant impact on the environment through the significance criteria analysis, preparation of an EIS would be required. To support the significance criteria analysis, various technical studies have been prepared by experts to analyze the project’s potential impacts on specific areas, including infrastructure, traffic, biological resources, and archaeological resources and where applicable, included recommended mitigative

strategies to avoid or manage impacts so that they would not be substantial. For example, the flora and fauna survey identified known endangered species within the project site and included recommended mitigation measures such as out planting those known endangered species and including them in LT's program offerings so that beneficiaries can learn about the significance of those plants. The EA also discusses mitigation measures received from the State of Hawai'i, Department of Land and Natural Resources, Division of Forestry and Wildlife with regard to State-listed and endemic species. The project will implement the recommended mitigation measures where feasible. The archaeological studies also included several mitigation strategies, including burial treatment, preservation, data recovery, and monitoring. There are several important sites within the MPD area that will be preserved onsite and that will feature interpretive signage so that their significance can be celebrated and shared with the community. All the archaeological surveys and mitigation plans have been reviewed and accepted by the SHPD. Based on the significance criteria analysis supported by the technical studies included in the Draft EA, the Planning Department anticipated that the project would result in a Finding of No Significant Impact (FONSI) and therefore, the Draft EA was published with an "Anticipated Finding of No Significant Impact" (AFNSI) in the Environmental Review Program's Environmental Notice on March 8, 2024.

The Draft EA was revised to incorporate the comments received during the 30-day public review period and was submitted to the Planning Department for review as a Final EA. Based on the significance criteria analysis, the Planning Department determined that the project can qualify for a FONSI determination, and as such, preparation of an EIS is not required.

It is also noted that a Final EA (FONSI) was published in April 2019 for the previous iteration of the MPD, which included larger commercial components and fewer residential units (hereinafter referred to as the "2019 Final EA"). The results of the technical studies and the significance criteria analysis for the current iteration of the MPD (2024 Final EA) do not significantly differ from the 2019 Final EA (FONSI).

As noted in the Draft EA, LT currently has sufficient available water credits that may be used to service the demand generated by the MPD under the Keahuolū Lands Water Resources Development Agreement (KLWRA) and the Makalapua Business Center Water Commitment (MBCWC) with the DWS. It should be noted that although LT has enough water credits to accommodate the MPD at this time, LT's other planned projects in Kona are in various planning stages and will also require water credits. As such, LT is in the process of developing a new regional water source which is intended to be dedicated to the County once completed. In addition to meeting water needs for LT's other planned projects in Kona, this new water

source would provide water for the County's future water needs in the Kona region.

The Infrastructure Report prepared for the project and included in the EA states that the proposed onsite wastewater collection system will follow the proposed public roadway system and will be conveyed by gravity sewer lines to the existing Kealakehe Sewer Pump Station (SPS) or a new SPS to be constructed as part of this project. From the SPS, flows will be conveyed to the existing Kealakehe Wastewater Treatment Plant (WWTP). Based on discussions with the Department of Environmental Management (DEM), the Kealakehe WWTP has capacity to accept the flows generated by MPD. Treated wastewater from the WWTP is discharged to an infiltration trench on the mauka side of Queen Ka'ahumanu Highway. We note that LT is aware that the County is currently addressing legal issues regarding the need to obtain a National Pollutant Discharge Elimination System permit for these discharges. The project's sewer system will be designed to meet the requirements of the DEM in accordance with the "Wastewater System Design Standards, City and County of Honolulu" dated July 2017. The method of discharge of wastewater by the County's WWTP is beyond the scope of this EA and should be addressed by the DEM.

**Comment No. 5:**

*Will this proposed action significantly affect the quality of the human environment (40 CFR 1508.14)? For example, will it significantly alter or destroy valuable wetlands, important farmlands, cultural resources, or threatened and endangered species? Will it affect social values, water quality, fish and wildlife habitats, or wilderness and scenic areas?) Reread the Queens' mission statement. Do the EIS.*

**Response:** The EA for the MPD is being prepared pursuant to Chapter 343, HRS. The Code of Federal Regulations (CFR), Title 40 is applicable to Federal actions being assessed under the National Environmental Policy Act (NEPA) and is not applicable to the MPD. Nevertheless, as discussed above, various technical studies were prepared to determine whether or not the proposed action may have a significant impact on the environmental and/or socio-economic conditions of the area, and, where appropriate, recommended mitigative strategies to avoid or manage impacts so that they would not be substantial. It is noted that the project site does not have any wetlands, Important Agricultural Lands, or existing agricultural operations and measures have been developed to mitigate or otherwise manage impacts to endangered species, historic and cultural sites, and infrastructure demands. Based on the significance criteria analysis supported by the technical studies, the Draft EA with an AFONSI determination was published in March 2024. After the 30-day comment period for the Draft EA, the Final EA for the project was submitted to the Planning Department, and

the Department has determined that the project can qualify for a FONSI and therefore an EIS is not required. As the MPD site is part of LT's endowment, and the development of this project will provide sustainable income for LT to fund its program offerings and operations, LT maintains that this project is in alignment with the Queen's Deed of Trust and thus, LT's mission to support Hawai'i's most vulnerable youth.

We appreciate your input and will include a copy of your letter along with this response letter in the Final EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uoklani Trust  
Keith Uemura, Park Engineering, Inc.

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Nancy Sakamoto  
76-4358 Lelani St  
Kailua-Kona, HI 96740

April 12, 2024

Lili'uokalani Trust  
P.O. Box 31000  
Honolulu HI 96849-5442

RE: Makalapua Project District

To whom it may concern:

I would like to send this letter in support of the Makalapua Project District as I see that this project will be a positive community amenity for Kona.

There is no question as to the dire need for more housing of all types in our community, there is also the need for housing that is close to places of employment to counter the cost of transportation and parking to and from the location of such jobs available within the village as well.

The location is suitable for this type of development as it has existing roadways and nearby infrastructure systems important for such a development. The proposed density is a good thing for Kona as it provides options for those who want to be within the district of Kailua village and close to amenities such as the parks and beaches for their families to enjoy.

The project makes good use of the land and preserves significant cultural sites in perpetuity. Seeing a project that keeps our values and culture from the past and present, while looking forward to the future for our community to thrive in all walks of life is refreshing. Not just another subdivision, but a vision for our housing for all ages, that mixes accessibility, affordability and culture within a walkable development is key to sustaining a good healthy community.

I am happy to provide my support for this project, and hope that it will move forward soon.

Sincerely and mahalo,



Nancy Sakamoto

October 1, 2024

**Via email:** [nsakamoto@mmirealty.com](mailto:nsakamoto@mmirealty.com)

Nancy Sakamoto  
76-4358 Lelani Street  
Kailua-Kona, Hawai'i 96740

**SUBJECT:** Draft Environmental Assessment for the Proposed Makalapua Project District Project, Kailua-Kona, County of Hawai'i, Hawai'i

Dear Ms. Sakamoto:

Thank you for your letter dated April 12, 2024 on the Draft Environmental Assessment (EA) for the Proposed Makalapua Project District Project. On behalf of the Lili'uokalani Trust, we thank you for your support and encouragement of the project for its ability to bring new housing options to the community while preserving community values and cultural sites.

We appreciate your review of the Draft EA and will include a copy of your letter along with this response letter in the Final EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uokalani Trust  
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Aloha

My name is Wai and I am a native Hawaiian with ancestral roots from O'ahu and Kaua'i. I live in Ka'ūmana now with my husband, our two year old son, and our 1-week old daughter. In 2020 we moved to Kona in the ahupua'a of Hōlualoa (kai), and so we are former Kona residents. During our time in living near the kai in Kona, we took part in regular gathering of fish for family consumption, and lā'au for medicine and hula ceremony. In a short amount of time it became increasingly apparent that the ecosystems along the Kona coastline are in balance and harmony with the kula and uplands as well, stretching up onto the slopes of Hualālai. The rains and upland activity immediately impacted the ocean water clarity and fish and other kai species presence/absence. As this leeward coast already struggles greatly with managing runoff and human waste, I am writing to urge the Lili'uokalani Trust, as it is embedded in your mission and in the hearts of all who are carrying out the Queen's hopes and legacy, to consider these points of concern by the communities of Kona, Keahuolū, human and non-human:

1. The proposed project requires water credits that are currently in lack.
2. An environmental impact study on groundwater, groundwater-dependent species, and flora and fauna within those ecosystems, is yet to be addressed.
3. Sewage processing and the impact of nutrient loads to said ecosystems, marine and terrestrial life, remain unclear by the DEA.
4. A new regional water source for the proposed project is yet to be addressed.
5. The impact on civilians in the vicinity is yet to be addressed with regard to roadway improvements, traffic, and evacuation routes in case of natural disaster.

With these issues in mind, and as beneficiaries of the Trust and the Queen's life work, with care in mind for our close friends that live and work in the vicinity, my family and I urge the Trust to reconsider the project as proposed and request the State of Hawaii Planning Department to conduct a thorough EIS for the proposed project as soon as possible and certainly prior to any initial action.

Mahalo

October 1, 2024

**Via email:** [amberau@icloud.com](mailto:amberau@icloud.com)

Wai Needham

**SUBJECT:** Draft Environmental Assessment for the Proposed Makalapua Project District Project; Kailua-Kona, County of Hawai'i, Hawai'i

Dear Ms. Needham:

Thank you for your email dated April 7, 2024 providing comments on the Draft Environmental Assessment (EA) for the Proposed Makalapua Project District (MPD) Project. On behalf of the Lili'uokalani Trust (LT), we offer the following information in response to the comments received:

**Comment No. 1:**

*My name is Wai and I am a native Hawaiian with ancestral roots from O'ahu and Kaua'i. I live in Ka'ūmana now with my husband, our two year old son, and our 1-week old daughter. In 2020 we moved to Kona in the ahupua'a of Hōlualoa (kai), and so we are former Kona residents. During our time in living near the kai in Kona, we took part in regular gathering of fish for family consumption, and lā'au for medicine and hula ceremony.*

**Response:** We appreciate your mana'o and efforts to pass on traditional culture-based knowledge to your 'ohana.

**Comment No. 2:**

*In a short amount of time it became increasingly apparent that the ecosystems along the Kona coastline are in balance and harmony with the kula and uplands as well, stretching up onto the slopes of Hualālai. The rains and upland activity immediately impacted the ocean water clarity and fish and other kai species presence/absence. As this leeward coast already struggles greatly with managing runoff and human waste, I am writing to urge the Lili'uokalani Trust, as it is embedded in your mission and in the hearts of all who are carrying out the Queen's hopes and legacy, to consider these points of concern by the communities of Kona, Keahuolū, human and non-human:*

**Response:** We acknowledge your comment. LT is also aware of the sensitive and cyclical nature of our ecosystems. LT strives to be good stewards of its lands. It is because of this appreciation and understanding of its kuleana that LT assembled a team of experts to prepare the technical reports that inform the analysis contained in the Draft EA and to minimize the potential environmental, social, and archaeological impacts from the proposed MPD as much as possible.

**Comment No. 3:**

1. *The proposed project requires water credits that are currently in lack.*

**Response:** LT currently has sufficient water credits that may be used to service the calculated demand generated by the MPD under the Keahuolū Lands Water Resources Development Agreement and the Makalapua Business Center Water Commitment with the Department of Water Supply (DWS). It should be noted that although LT has enough water credits to accommodate the MPD at this time, LT's other planned projects in Kona are in various planning stages and will also require water credits. As such, LT is in the process of developing a new regional water source which is intended to be dedicated to the County once completed. In addition to meeting water needs for LT's other planned projects in Kona, this new water source would provide water for the County's future water needs in the Kona region.

**Comment No. 4:**

2. *An environmental impact study on groundwater, groundwater-dependent species, and flora and fauna within those ecosystems, is yet to be addressed.*

**Response:** As part of the EA process, a flora and fauna survey was conducted for the project area in order to identify any native, threatened, or endangered species of plants or animals within the project area and to advance mitigation measures aimed at avoiding and managing impacts to these species. The EA also discusses mitigation measures received from the State of Hawai'i, Department of Land and Natural Resources, Division of Forestry and Wildlife with regard to State-listed waterbirds (i.e., ae'o, 'alae ke'oke'o, nēnē), the endemic Hawaiian short-eared owl (pueo), State-listed Hawaiian hawk ('io), and the State-listed Blackburn's sphinx moth. The project will implement the recommended mitigation measures where feasible.

As stated, LT currently has sufficient water credits to service the demand that will be generated by the MPD project. The new regional water source development described above is not part of the scope of the MPD project, and therefore its, potential impacts to groundwater or the Ground

Dependent Ecosystems (GDEs) are not analyzed as part of the EA for the MPD.

It is noted that the U.S. National Park Service (NPS) Kaloko-Honokohau National Historic Park and the State of Hawai'i, Commission on Water Resource Management (CWRM) are using adaptive management to address, monitor, and mitigate impacts to GDEs. It is also noted that whereas the existing deep wells tap the high-level aquifer that contributes some portion of recharge to the basal aquifer; hence, having the potential to impact nearshore tidal zones by reducing basal discharge to the ocean, the new, proposed regional well (not part of the MPD) is attempting to utilize the underlying deep confined freshwater aquifer that is understood to be discharging into deep offshore waters, and thus is not anticipated to impact near shore tidal groundwater dependent ecosystems or deepwater offshore cultural practices.

As stated in the Infrastructure Report prepared for the project, stormwater runoff generated by the proposed development will be collected by swales, ditches, gutters, inlets and/or catch basins then conveyed to drywells and/or infiltration areas for onsite disposal so as to not impact downstream properties, including groundwater and nearshore water quality. Drainage improvements for the project will be required to conform to the "Storm Drainage Standards", Department of Public Works, County of Hawai'i, dated October 1970, as amended. In addition, the project will consider Low Impact Development practices in the design of stormwater drainage systems and incorporate Best Management Practices to mitigate the effects on non-point source pollutants in stormwater discharges.

**Comment No. 5:**

3. *Sewage processing and the impact of nutrient loads to said ecosystems, marine and terrestrial life, remain unclear by the DEA*

**Response:** The Infrastructure Report prepared for the project and included in the EA states that the proposed onsite wastewater collection system will follow the proposed public roadway system and will be conveyed by gravity sewer lines to the existing Kealakehe Sewer Pump Station (SPS) or a new SPS to be constructed as part of this project. From the SPS, flows will be conveyed to the existing Kealakehe Wastewater Treatment Plant (WWTP). Based on discussions with the Department of Environmental Management (DEM), the Kealakehe WWTP has capacity to accept the flows generated by MPD. Treated wastewater from the WWTP is discharged to an infiltration trench on the mauka side of Queen Ka'ahumanu Highway. We note that LT is aware that the County is currently addressing legal issues regarding the need to obtain a National Pollutant Discharge Elimination System permit for these discharges. The project's sewer system will be designed to meet the

requirements of the DEM in accordance with the “Wastewater System Design Standards, City and County of Honolulu”, dated July 2017. The method of discharge of wastewater by the County’s WWTP is beyond the scope of this EA and should be addressed by the DEM.

**Comment No. 6:**

4. *A new regional water source for the proposed project is yet to be addressed.*

**Response:** As previously mentioned, LT is in the separately process of developing a new regional water which is intended to be dedicated to the County once completed. The new regional water source development is not part of the scope of the MPD. This new water source would provide water for the County’s future water needs in the Kona region and would provide an allocation to LT to support its planned projects in Kona.

**Comment No. 7:**

5. *The impact on civilians in the vicinity is yet to be addressed with regard to roadway improvements, traffic, and evacuation routes in case of natural disaster.*

**Response:** The Traffic Impact Analysis Report (TIAR) prepared for the project provides recommended roadway improvements to address traffic generated by the project as well as other known projects in the area at partial buildout of MPD (2027) and full buildout (2032). We note that because of the change in uses with the current MPD plan which features more residential units and less commercial square footage as compared to the 2019 iteration of the MPD plan, the TIAR for the current plan notes a 20 percent reduction in projected traffic generated. The TIAR was included and discussed in the Draft EA for the project.

Regarding evacuation routes, the MPD area is located inland from the coast and thus is outside of the tsunami evacuation area, not within a flood zone which carries development restrictions according to the Federal Emergency Management Area flood insurance rate map for the area, and is outside (inland of) the projected 3.2-foot sea level rise exposure area according to the Hawai’i Climate Change Mitigation and Adaptation Commission. Nonetheless, with the improvements/extensions proposed to existing Makala Boulevard and Kuakini Highway and new internal roadways within the MPD project, circulation within the area will be improved. It is also noted that the TIAR analysis studies peak hour conditions which represent the highest levels of traffic volumes, so off-peak hours are expected to have a lesser impact.

**Comment No. 8:**

*With these issues in mind, and as beneficiaries of the Trust and the Queen's life work, with care in mind for our close friends that live and work in the vicinity, my family and I urge the Trust to reconsider the project as proposed and request the State of Hawaii Planning Department to conduct a thorough EIS for the proposed project as soon as possible and certainly prior to any initial action.*

**Response:** We acknowledge your comment regarding preparation of an Environmental Impact Statement (EIS). It was determined that an EIS was not required for the project through the environmental review process. In the Chapter 343, Hawai'i Revised Statutes (HRS) environmental review process, an accepting agency for an EA (in this case, the County of Hawai'i Planning Department) determines whether or not a proposed action may have a significant impact on the environment using the "Significance Criteria" pursuant to Section 11-200.1-13, Hawaii Administrative Rules (HAR). Should it be determined that the proposed action would have a significant impact on the environment through the significance criteria analysis, preparation of an EIS would be required. To support the significance criteria analysis, various technical studies have been prepared by experts to analyze the project's potential impacts on specific areas, including infrastructure, traffic, biological resources, and archaeological resources and where applicable, included recommended mitigative strategies to avoid or manage impacts so that they would not be substantial. For example, the archaeological studies included several mitigation strategies, including burial treatment, preservation, data recovery, and monitoring. There are several important sites within the MPD area that will be preserved onsite and that will feature interpretive signage so that their significance can be celebrated and shared with the community. All the archaeological surveys and mitigation plans have been reviewed and accepted by the SHPD. Based on the significance criteria analysis supported by the technical studies included in the Draft EA, the Planning Department anticipated that the project would result in a Finding of No Significant Impact (FONSI) and therefore, the Draft EA was published with an "Anticipated Finding of No Significant Impact" (AFNSI) in the Environmental Review Program's Environmental Notice on March 8, 2024.

The Draft EA was revised to incorporate the comments received during the 30-day public review period and was submitted to the Planning Department for review as a Final EA. Based on the significance criteria analysis, the Planning Department determined that the project can qualify for a FONSI determination, and as such, preparation of an EIS is not required.

It is also noted that a Final EA (FONSI) was published in April 2019 for the previous iteration of the MPD, which included larger commercial



components and fewer residential units (hereinafter referred to as the “2019 Final EA”). The results of the technical studies and the significance criteria analysis for the current iteration of the MPD (2024 Final EA) do not significantly differ from the 2019 Final EA.

We appreciate your input and will include a copy of your letter along with this response letter in the Final EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uoklani Trust  
Keith Uemura, Park Engineering, Inc.

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April 16, 2024

To Whom It May Concern:

RE: Lili'uokalani Trust Makalapua Project District

Aloha:

Just wanted to take a few minutes to let you know that it is our opinion that the addition of work force and affordable housing that is included in the Lili'uokalani Trust's Makalapua Project will bring much needed housing for our community. We all read often how our younger generation is leaving the island due to high housing and living costs. This project will bring much needed affordable housing that the occupants can enjoy and hopefully work, live and enjoy life in a walkable community in Kona.

The time and effort that has been taken to include the connectivity, trails (green space), new jobs all while providing affordable housing and respecting the cultural sites is fabulous.

Please welcome this project and know that this developer has their eye on the ball with a balance of needed housing, work places close to home, green spaces, cultural respect all while connecting to the existing infrastructure that gives Kona a Sense of Place.

Mahalo.

A handwritten signature in black ink, appearing to read "Debbie Parmley". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Debbie Parmley

October 1, 2024

**Via Email: [Debbie.parmley@colliers.com](mailto:Debbie.parmley@colliers.com)**

Debbie Parmley

**SUBJECT: Draft Environmental Assessment for the Proposed Makalapua Project District Project; Kailua-Kona, County of Hawai'i, Hawai'i**

Dear Ms. Parmley:

Thank you for your letter dated April 16, 2024 providing comments on the Draft Environmental Assessment (EA) for the Proposed Makalapua Project District Project. On behalf of the Lili'uokalani Trust (LT), we wanted to thank you for your letter of support for the Makalapua Project District. In addition to your letter of support, LT would like to express their gratitude for your participation in the Community Advisory Group. The thoughtful feedback you have provided throughout the planning process of the Makalapua Project District is greatly appreciated and has had positive impacts on the planning of this project.

We appreciate your input and will include a copy of your letter along with this response letter in the Final EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uokalani Trust

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**From:** Nicole Lui <[keakaonaalii54@gmail.com](mailto:keakaonaalii54@gmail.com)>  
**Sent:** Thursday, May 16, 2024 9:45 AM  
**To:** Bryan Esmeralda <[besmeralda@onipaa.org](mailto:besmeralda@onipaa.org)>  
**Cc:** General eMail <[planning@munekiyohiraga.com](mailto:planning@munekiyohiraga.com)>  
**Subject:** support letter

This is an EXTERNAL e-mail

This is an EXTERNAL e-mail

Aloha mai Kakou,

Here is the long awaited support letter. Sorry it took so long.

Ke Aloha nui ia oukou

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Aloha,

My Name is Nicole Kealohaokalani Lui and I am a lineal and cultural Descendant of the lands of Keahuolu.

This short letter states my support for the Liliuokalani Makalapua Project, I am in support of the development of this project because it is my hope that the revenue will continue to assist in the care, education and life of the beneficiaries of the Trust. It is also my hope that these same beneficiaries will be given the first opportunity to be employed before anyone else so they may be able to continue their education, support themselves and their families. It is also my hope that this will eventually help to set up a platform for hands on learning for some of the beneficiaries. I am also in support of this project because of the location of the project. If it were the lands to the North I would be in opposition. The Plains of Kanoenoe should remain open space for it is a storied landscape. It is an ancient cultural and historical landscape and needs to remain as such.

Mahalo for giving me this opportunity to support this project.

Imua

Na'u,

Nicole Lui

Lineal and Cultural Descendant of Keahuolu

CAG Member

October 1, 2024

**Via Email: [keakaonaalii54@gmail.com](mailto:keakaonaalii54@gmail.com)**

Nicole Lui

**SUBJECT: Draft Environmental Assessment for the Proposed Makalapua Project District Project; Kailua-Kona, County of Hawai'i, Hawai'i**

Dear Ms. Lui:

Thank you for your letter dated May 16, 2024 providing comments on the Draft Environmental Assessment (EA) for the Proposed Makalapua Project District Project. On behalf of the Lili'uokalani Trust (LT), we wanted to thank you for your letter of support for the Makalapua Project District. In addition to your letter of support, LT would like to express their gratitude for your participation in the Community Advisory Group. The thoughtful feedback you have provided throughout the planning process of the Makalapua Project District is greatly appreciated and has had positive impacts on the planning of this project.

We appreciate your input and will include a copy of your letter along with this response letter in the Final EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama, AICP  
Manager

YU:de

cc: Bryan Esmeralda, Lili'uoklani Trust

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**REFERENCES**

**XI**



# XI. REFERENCES

Attias E, Thomas D, Sherman D, Ismail K, Constable S. Marine electrical imaging reveals novel freshwater transport mechanism in Hawai'i. *Sci Adv.* 2020 Nov 25;6(48):eabd4866.doi: 10.1126/sciadv.abd4866. PMID: 33239299; PMCID: PMC7688328.

Climate Resilience Collaborative, Annual Report 2022, <https://www.soest.hawaii.edu/crc/index.php/2023/01/06/annual-report/>, accessed 29 June 2022.

County of Hawai'i, County of Hawai'i General Plan, February 2005.

County of Hawai'i, Department of Environmental Management, Wastewater Division, County of Hawai'i Sewer Network: Kailua-Kona, Hawai'i, October 2010.

County of Hawai'i, Department of Parks and Recreation, Final Environmental Assessment: Kailua Park Master Plan aka Old Airport Park/Maka'eo County Contract C.002100, February 2011.

County of Hawai'i, Department of Research and Development, Hawai'i County Databook 2015, 2015.

County of Hawai'i. Island of Hawai'i TMK Parcels 002E [GIS polygon shapefile]. Created by Geographic Decision Systems International and County of Hawai'i. (2010). Retrieved from <http://Hawaii.gov/dbedt/gis/download.htm>.

County of Hawai'i, Kona Community Development Plan: Mapping Kona's Future, September 2008. Amended September 2019.

County of Hawai'i. Official Kona Community Development Map. (GIS polygon shapefile). Created by County of Hawai'i, Planning Department. (2008).

County of Hawai'i, Planning Department, Draft General Plan 2045, <https://www.planning.hawaiicounty.gov/general-plan-community-planning/gp>.

County of Hawai'i, Planning Department, Hawai'i County Zoning. (GIS polygon shapefile). Created by County of Hawai'i, Planning Department using ArcInfo 7.2.1, (2010). Retrieved from <http://Hawaii.gov/dbedt/gis/download.htm>.

County of Hawai'i. Special Management Areas. (GIS polygon shapefile). Digitized by Office of Planning using ArcInfo 7.1.1 from County blue line maps. (2009). Retrieved from <http://Hawaii.gov/dbedt/gis/download.htm>.

Federal Emergency Management Agency, Flood Rate Insurance Map, Community Panel Nos. 1551660691C, 1551660692C, 155166094C and 1551660713D, 1988.

Fukunaga & Associates, Inc., Hawai'i County Water Use and Development Plan Update, prepared for County of Hawai'i, August 2010.

Hawai'i County General Plan. 2005 Land Use Plan Allocation Guide. (GIS polygon shapefile). Digitized by Office of Planning using ArcInfo. (2007). Retrieved from <http://Hawaii.gov/dbedt/gis/download.htm>.

Hawai'i Police Department, Hawaii Police Department Annual Report Fiscal Year 2020-2021, <https://www.hawaiipolice.com/wp-content/uploads/2022/06/2020-2021-HPD-Annual-Report.pdf>, accessed 30 June 2023.

Hawai'i Wildfire Management Organization (HWMO). North Kona, Hawaii, Community Wildfire Protection Plan, 2016, <https://dlnr.hawaii.gov/forestry/files/2018/04/NKCWPPplanwappendices161229.compressed.pdf>.

International Volcanic Health Hazard Network (IVHHN), Real time and historic volcanic data, 2023. <https://vog.ivhhn.org/current-air-quality>.

Juvik, S.P. and J.O. Juvik, eds., Atlas of Hawai'i, 3rd Edition, Honolulu, Hawai'i: University of Hawai'i Press, 1998.

Land Study Bureau, University of Hawai'i. Land Study Bureau (LSB) Detailed Land Classification. (GIS polygon shapefile). Digitized by Office of Planning using ArcInfo version 7. (1998). Retrieved from <http://Hawaii.gov/dbedt/gis/download.htm>.

Lifestyle Solar, How Many kWh Does a House Use?, <https://www.lifestylesolarinc.com/post/how-many-kwh-does-a-house-use#:~:text=Based%20on%20the%20average%20home,different%2Dsize%20homes%20might%20use>, accessed 30 June 2023.

Lili'uokalani Trust, Her Legacy, <http://www.onipaa.org/pages/her-legacy>, accessed April 2016.

Lockwood, John P. and Michael O. Garcia, Volcanic Hazards at the HELCO Keahole Generating Station, North Kona, Hawai'i, prepared for Belt-Collins Hawaii, Ltd., February 28, 2004.

National Oceanic and Atmospheric Administration, Office for Coastal Management, Sea Level Rise Viewer, <https://coast.noaa.gov/digitalcoast/tools/slr>, Accessed August 2016.

Pacific Disaster Center. Tsunami Evacuation Zones. (GIS polygon shapefile). Digitized by Pacific Disaster Center using Arc View version 3.0a from State of Hawai'i Civil Defense Tsunami Evacuation Zone proof maps. (1998). Retrieved from <http://Hawaii.gov/dbedt/gis/download.htm>.

Reeve, Rowland B., Paul L. Cleghorn, and Elizabeth L. Kahahane, 2015 Archaeological Inventory Survey of Urban Phase I and Urban Phase II Parcels, Queen Lili'uokalani Trust Lands, in Keahuolū, North Kona, Island of Hawai'i (TMK: (3) 7-4-020:009-015, 020, 022, 026). Pacific Legacy, Inc. Submitted to Queen Lili'uokalani Trust.

Scott, Joe H.; Gilbertson-Day, Julie W.; Moran, Christopher; Dillon, Gregory K.; Short, Karen C.; Vogler, Kevin C. 2020. Wildfire Risk to Communities: Spatial datasets of landscape-wide wildfire risk components for the United States. Fort Collins, CO: Forest Service Research Data Archive. Updated 25 November 2020. <https://doi.org/10.2737/RDS-2020-0016>.

SMS Research and Marketing Services, Inc., 2019, Hawai'i Housing Planning Study. <https://dbedt.hawaii.gov/hhfdc/files/2020/01/FINAL-State-Hawaii-Housing-Planning-Stud.pdf>.



State of Hawai'i, Department of Agriculture. Agricultural Lands of Importance to the State of Hawai'i. (GIS polygon shapefile). Digitized by Office of State Planning using ArcInfo version 6 from State Department of Agriculture's 1:24,000 blue-line maps. Retrieved from <http://Hawaii.gov/dbedt/gis/download.htm>.

State of Hawai'i, Department of Business, Economic Development, and Tourism, 2021 State of Hawaii Databook, accessed 6/27/23, <https://dbedt.hawaii.gov/economic/databook/db2021/>.

State of Hawai'i, Department of Business, Economic Development and Tourism, "Hawai'i's December Unemployment Rate Remains at 2.9 Percent" <https://governor.hawaii.gov/wp-content/uploads/2024/01/December-2023-Labor-Statistics-Press-Release.pdf>, Accessed February 2024.

State of Hawai'i, Department of Education, Official Enrollment Count, 2022-2023 School Year, <https://www.hawaiipublicschools.org/DOE%20Forms/Enrollment/HIDOEenrollment2022-23.pdf>, accessed 30 June 2023.

State of Hawai'i, Department of Health, Office of Environmental Planning, Water Quality Standards Map: Island of Hawai'i, October 1987.

State of Hawai'i, Department of Health, State of Hawai'i Annual Summary 2023: Air Quality Data, Accessed June 2024.

State of Hawai'i, Department of Labor and Industrial Relations, Job Count by Industry: Hawai'i County, <http://www.hiwi.org/gsipub/index.asp?docid=421>, accessed June 2024.

State of Hawai'i, Hawai'i State Planning Act, Chapter 226, Hawai'i Revised Statutes.

State Land Use Commission. State Land Use District Boundaries. (GIS polygon shapefile). Digitized by Office of Planning using ArcInfo 4, 5, and 6 from State Land Use Commission's 1:24,000 mylar maps. (2010). Retrieved from <http://Hawaii.gov/dbedt/gis/download.htm>.

U.S. Census Bureau, QuickFacts: Hawaii, 2020, accessed 6/27/23, <https://www.census.gov/quickfacts/HI>.

U.S. Census Bureau, Table B17006: Poverty Status in the Past 12 Months of Related Children Under 18 Years by Family Type by Age of Related Children Under 18 Years, <https://data.census.gov/table?t=060:Children:Poverty&q=040XX00US15&tid=ACSDT5YSPT2021.B17006>, accessed 7 August 2023.

U.S. Department of Agriculture, National Cooperative Soil Survey, Honokohau Series, 2012. [https://soilseries.sc.egov.usda.gov/OSD\\_Docs/H/HONOKOHAU.html](https://soilseries.sc.egov.usda.gov/OSD_Docs/H/HONOKOHAU.html).

U.S. Department of Agriculture, Natural Resources Conservation Service. Soil Survey Geographic (SSURGO) Database for Hawai'i County, Hawai'i, <http://websoilsurvey.nrcs.usda.gov>, accessed June 2024.

U.S. Department of Agriculture, Soil Conservation Service, Soil Survey of the Island of Hawai'i, State of Hawai'i, 1973.

U.S. Environmental Protection Agency (EPA), Causes of Climate Change, <https://www.epa.gov/climatechange-science/causes-climate-change>, accessed 30 June 2023.

U.S. Environmental Protection Agency (EPA), GHGRP Emissions by Location, <https://www.epa.gov/ghgreporting/ghgrp-emissions-location>, accessed 30 June 2023.

U.S. Fish and Wildlife Service, National Wetlands Inventory, <http://137.227.242.85/wetland/wetland.html>, accessed December 2015.

U.S. Geological Survey, Hawaiian Volcano Observatory, Destructive Earthquakes in Hawai'i County Since 1868, <http://hvo.wr.usgs.gov/earthquakes/destruct/>, updated July 15, 2013, accessed December 2015.

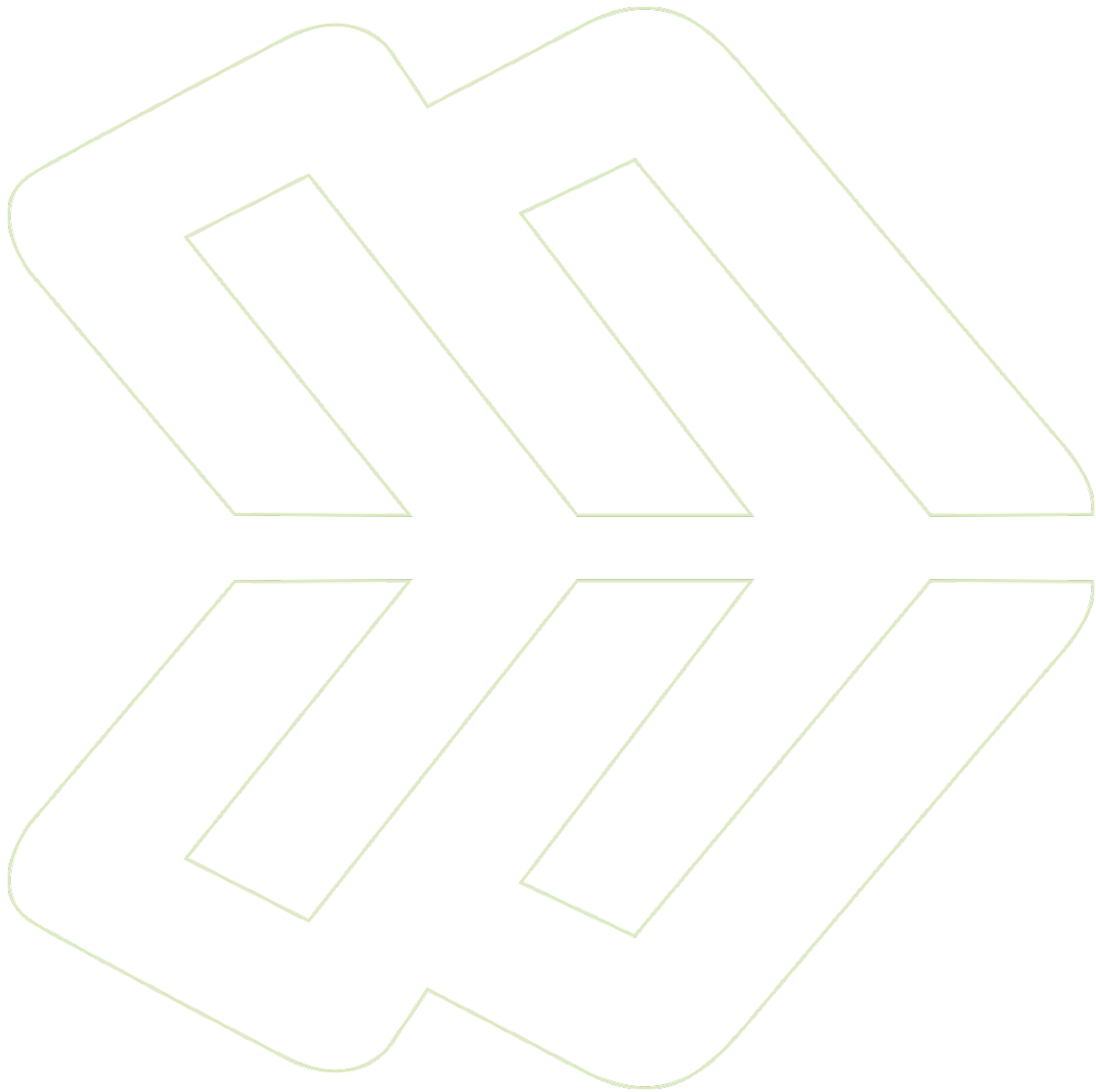
U.S. Geological Survey, Hawaiian Volcano Observatory, Earthquakes, <http://hvo.wr.usgs.gov/earthquakes/>, published June 18, 2001, accessed December 2015.

U.S. Geological Survey, Hawaiian Volcano Observatory, Hazards in Hawai'i, <http://hvo.wr.usgs.gov/earthquakes/hazards/>, published June 18, 2001, accessed December 2015.

U.S. Geological Survey, Hawaiian Volcano Observatory, Hualālai: Hawai'i's Third Active Volcano, <http://hvo.wr.usgs.gov/volcanoes/hualalai/>, published June 18, 2001, accessed December 2015.

U.S. Geological Survey, Lava Flow Hazard Zone Maps, <http://pubs.usgs.gov/gip/hazards/maps.htm>, published December 18, 1997, accessed March 2016.

U.S. Geological Survey, Earthquake Hazards Program, <https://earthquake.usgs.gov/earthquakes/eventpage/us1000dyad/executive>, May 4, 2018, accessed October 2023.



**MUNEKIYO HIRAGA**

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