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# Compilation of Public Testimony

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## Hydrologic Unit:

### **Wailua (2040)**

- North Fork Wailua (Wai'ale'ale) Stream
- Waikoko Stream

## **Island of Kaua'i**

**August 2018**

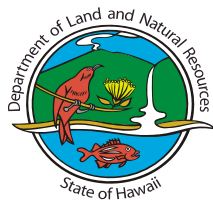
**PR-2018-07**



**State of Hawaii**

**Department of Land and Natural Resources**

**Commission on Water Resource Management**





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This document is a compilation of all public testimony submitted to the Commission on Water Resource Management (Commission) on the Instream Flow Standard Assessment Reports for the Surface Water Hydrologic Unit of Wailua (2040).

Testimony and/or comments contained herein were received at the June 21, 2018 Public Fact Gathering Meeting held at Kaua'i Community College, Līhu'e, Kaua'i or were submitted to the Commission up until 4:30 p.m. on July 13, 2018.

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## **Testimony from June 21, 2018 Public Fact Gathering Meeting**

### **1) Laurel Loo**

Thank you. My name is Laurel Loo and I serve as general counsel for the Kauaʻi Island Utility Cooperative. As you are aware, KIUC currently holds a revocable permit for the Blue Hold diversion and the associated ditch system which feeds into the Upper and Lower Waiahi Hydroelectric Plants, which have been operated by KIUC since 2002. In 2004, KUC applied for a long-term lease for the Blue Hole diversion and is hoping that the Board of Land and Natural Resources will be in a position to make a decision on that application by the end of this year. Setting the interim inflow stream standards for the North Fork Wailua is a critical step that must be taken before the BLNR can act upon the lease application. KIUC has been working closely with the staff of the Commission on Water Resource Management in its efforts to conduct the necessary due diligence in making a recommendation on the IIFS. We believe that the Commission staff has done an exhaustive review of available information and resources, and has taken into account the input of numerous stakeholders. KIUC has submitted written testimony, which we share with you tonight and we will also have a number of speakers this evening touch upon the various aspects of KIUC's operations and the responsible stewardship that we have demonstrated over the past 16 years. We look forward to working with the Commission. Thank you.

### **2) Albert Genovia**

Aloha. Albert Genovia. I'm a long-time local islander. I believe that the natural flow of the aquatics should be restored and 100-percent should be diverted back to the original flow for the island of Kauaʻi, all of Hawaiʻi. It has the big potential, as far as islanders, living our islander life, identity, Hawaiian, be Hawaiian style, projecting our way of life in what we do, in our future. I think we've been actually on the backburner, sitting behind all of the business people that come to Hawaiʻi and try to make Hawaiʻi what they think. But I think if we try to take over, or be more Hawaiian style or identity, envision, we should ascertain better as far as using what we have as part of our natural resources and what you guys actually place on top your website. In order for us to follow as today's educational tool for our 'ōpio, for our future generation. To also, actually follow in this endeavor, and I think what we have as far as our business people, I think they should actually recognize that they should look at us as one of the foundations of our identity and our purpose of Hawaiian life. Thank you.

### **3) Jason Hines**

Hello and thank you for the opportunity to speak. My name is Jason Hines with the Joule Group and we've been working with KIUC since 2010 on a variety of water-related projects including the Blue Hole and Waikoko diversions and the Waiahi Hydros downstream. As everybody probably already knows both these diversions are legacy structures that were designed to divert all the water particularly at low-flows. Two years ago, KIUC initiated work, design work, to modify both those structures to ensure that continuous flows were released from the diversions. The designs actually require a fair amount of permitting which takes time to implement. So, in December, KIUC's Board approved plans and doing short-term modifications in order to make immediate releases while the permitting and the rest of the work that needed to be done to implement the long-term modifications took place. I brought a couple pictures just to show what

that work is. The design work, actually the long-term design work, involves a new spillway at Blue Hole and modifications to the gates which will ensure reliable releases during all flows including low-flows. And the short-term work which has been completed were things that we could do without permits that could be implemented quickly that would push water out and make sure that water was always in the stream. So this is a picture of the Blue Hole intake right now where we installed some boards over the intake to limit peak flows leaving, leaving on the ditch. This here is a photograph of the waste gate right in front of the intake, which we put a hole at the bottom which is the lowest point in the ditch which releases water back into the stream regardless of the flow. And then, just for those who haven't been there, we brought a picture that shows where the water leaves the system back into the stream at the tail end of our use of the water coming back out into Waiahi Stream. The only other testimony that I have is that I've been working up there for a number of years and I go up regularly and just want to say from my own personal experience every time I've been there over the last couple years since the changes in the diversion, there has been water flowing over the diversion and the stream has been wetted below the diversion. And now with these modifications, that will be definitively so in any flow condition. I just wanted to provide that update and information on what we have done. Thank you.

#### **4) Phil Tacbian**

Aloha. Phil Tacbian. Presently, I'm a member of the Board of Directors at KIUC. Previously, I served on the State Land Use Commission, Kaua'i County Board of Water Supply, and Hawai'i Water Works Association. The Wailua River area has been a fixture in my... to me, throughout my lifetime, as a child born and raised in the area, and I'm still there. The waters of the river have always, to me, been plentiful. It's been a place for us to play, for recreation, fishing, crabbing, and also in the upper area is the place where the hunters access the prime hunting grounds. And at the same time, I know that the waters of the river were used as a resource for agricultural purposes during the Līhu'e Plantation days and also for energy production when the hydro was built many, many years ago in the area. And all of this was made possible because of the diversion at Blue Hole. And not only that, the ditch from Blue Hole to Waikoko is also a great place for kids and families to go tubing and enjoy the waters of Wai'ale'ale. And my 60<sup>th</sup> class reunion, we had our group go up there and enjoy the tubing. And based on our age, we were grateful that we did not have to call 911, but everyone enjoyed it to the max. And anyway, from my perspective, there's always been enough water to satisfy all of these uses. And I'm very grateful today that the water commission is setting the inflow stream standards so that generations to come, my children, my great-grandchildren, there will be enough water for everyone. Mahalo.

#### **5) David Bissell**

Aloha. My name is David Bissell and I'm President and CEO of KIUC. Wanted to let you know that KIUC supports the establishment of updated interim instream flow standards at Blue Hole and Waikoko diversions. We understand the importance of your responsibility to protect our natural resources while balancing the needs to enable other beneficial uses of water of the state. KIUC remains committed to being a reliable participant in this effort and we are confident that an adequate interim instream flow standard can be established for Wailua to ensure mauka to makai streamflow, while also enabling other beneficial uses to continue. What was accomplished in Waimea last year, we were a part of that, and we know it can be done

successfully here in Wailua with all our efforts going forward. Since 2003, KIUC has operated the upper and lower Waiahi hydro plants using water from the Blue Hole and Waikoko diversions of the Wailua River by way of a revocable permit issued by the Board of Land and Natural Resources. And as a not-for-profit cooperative that's owned by its members that it serves, KIUC's mission is to provide clean, reliable electricity at the lowest possible cost. The diversions and ditch system were built more than a century ago to meet the needs of the Līhu'e Plantation Company. They operate today largely as they did when they were built in 1914 providing water to create electricity and irrigate agricultural lands for the farmers. Waiahi hydro plants are by far the most cost effective generating facilities KIUC owns and they are an important piece of our expanding renewable energy portfolio. Using hydropower from Waiahi instead of diesel, we are saving our members an estimated \$1.75 million dollars a year and it bears repeating that KIUC is a not-for-profit corporation. Any savings from this water and from our generation goes right back to our members who buy the electricity from our cooperative. Since assuming the revocable permit in 2002, KIUC has demonstrated the importance of responsible stewardship of these natural resources. Since 2004, we've been pursuing a long-term lease for Blue Hole diversion and over the past 14 years we've collaborated with other stakeholders such as the Office of Hawaiian Affairs and have completed a number of studies to address environmental and cultural concerns. We've worked closely with the Department of Land and Natural Resources over the years to make sure we're compliant with the terms of our permit and that we are not taking more water than we are entitled in our permit. However, KIUC has long recognized that times have changed since 1914 and re-engineering this diversion must occur. Jason Hines previously testified on our efforts, and I wanted to let you know that KIUC supports the changes to the diversion both on an interim and permanent basis in the event we receive a long-term lease. We believe that an appropriate interim instream flow standard will not only ensure the sustainability of the stream, it will also allow for historical beneficial uses to continue and contribute to a healthy and perspective community for Kaua'i. Thank you.

## **6) Dee Crowell**

Good evening. My name is Dee Crowell. I'm a director of KIUC and I just wanted to take this opportunity to reiterate what David said about the Waimea settlement that happened earlier this year. Some of those same principles can guide the decision-making in Wailua in terms of... The focus of the settlement was on making sure that there was continuous water flow from mauka to makai, while also providing an adequate water supply for agriculture and renewable energy. CWRM is to be commended for crafting a win-win situation for all involved in Waimea. For Wailua, KIUC recognizes there will be modifications made to Blue Hole diversion and that those modifications will leave more water in the river and divert less water into the ditch system. In fact, we have been working with DLNR, CWRM, and other agencies for years... I would have to say decades, to help gather data needed in order to set the appropriate instream flow standards. Most recently, as mentioned by Jason, the board appropriated funds for some short-term fixes that will result in more water being put back into the stream. We trust that you now have the information necessary to determine how much water is needed to ensure a healthy stream. Thank you.

## **7) William Eddy**

Hi, my name is William Eddy. I'm here to speak about the diversions and domestic water needs in the Līhu'e and Kapa'a areas. The County of Kaua'i has recently updated the general plan for

the island of Kauaʻi and the general plan identifies the housing needs, projected housing needs and current housing needs, for the island and it identifies in particular that the desired growth for the housing to occur in the Līhuʻe and Kapaʻa areas. And so that would include the watershed of Wailua. They identified these areas as areas of smart growth, areas in which the existing infrastructure can be leveraged and improved to provide housing. The infrastructure being water, wastewater, recycled wastewater, the availability of recycled wastewater, and also roadways. Smart growth means you can maximize investments in the area and so that means maximizing your dollars worth to improve traffic, improve wastewater systems, and improve water systems. So the anticipated, or desired, housing will naturally require domestic water. And so, I would like the Commission to please consider, when they're evaluating the Wailua watershed, the importance of domestic water needs as outlined in the Kauaʻi general plan. Thank you.

#### **8) Sean Stogner**

I'm Sean Stogner, general manager for Kauaʻi Backcountry Adventures, which submitted a statement so I'll be real quick. I'm just going to read a quick synopsis. Kauaʻi Backcountry Adventures, we've been in business for 15 years. We employ more than 100 Kauaʻi residents, born and raised here. We actively help maintain the former Līhuʻe Plantation irrigation system. We've taken hundreds of thousands of visitors and tens of thousands of local folks on our tubing tours. Tours that highlight our agricultural history. Our patrons wear safety gear, float in tubes down a portion of the ditch system, Hanamaulu Ditch system, encountering the native forests and viewing the tool marks left by the workers who cut the ditch and tunnels nearly 100 years ago. Regulations that will severely restrict the flow in the historic ditch system will damage our business and harm our community. What I'd just like to say really, really quick, as general manager I'm not in charge of the water flow. I am responsible for about 100 employees. When I take care of my employees really well, everything just seems to fall into place and everything has fell into place really good for the last 8 years. What I can tell you, the last 8 years when the Blue Hole diversion is not working properly, our water goes super low. Two or three days when it gets fixed, our water is back to normal. We have had to shut down before for a while. So, again, as general manager, I implore you to keep this diversion working for the 100 employees that we have that are working 2 or 3 jobs at a time. You know for Kauaʻi Backcountry, we're not just an employer, we're teaching these kids how to get out of their comfort zone, how to communicate, how to move onto bigger and better jobs. So, it's affecting a lot of local guys on the other side as well. Thank you.

#### **9) Makani Taniguchi**

Aloha. My name is Makani Taniguchi. Born and raised here on the beautiful island of Kauaʻi. Born right over there by Wilcox Hospital. Raised in Kapaʻa, right below Wailua. Pretty much, most of my life I've been up Wailua enjoying the Blue Hole intake, Waikoko intake, Kalahiki intake. You know, that's where my family would take us to go swimming, because now no more too much ponds up there, so the intake will hold us so we could go swimming. And I've been hunting up there for a little over 15 years, especially makai of the Blue Hole and Waikoko intake. From my experience, hunting up there, I have never seen the river dried up because get springs on the side of the mountains that the water could come down into the stream. And when it is low, I see more bass and 'o'opus in the water, so obviously the bass can come from makai all the way up there. To me, what was bothering me, is if we were to take away the intake and

get the wet season when it starts to rain hard. I can honestly tell you that I've only slept up in the mountain one time. And I believe it's because we get the intake up there that takes most of the water, so that's how we can go home. I gotta cross that to go back to the car, and then drive down the road, and then cross 'em again to go home. And majority of the time I make 'em home safely. Only one time I had to sleep up there. And for the most part, a lot of tourists now find the secret places to go hiking, which is going to the Ka'āpoko Tunnel, Ka'āpoko trail. And the tourists, they don't know when the rainy season is, so when the water come high, there's several times that I've had to stay up there with them and make sure that they wait 'til the river come down because most of them, they like just go home already. Like they say on the radio, don't drown, turn around. So I'm there, helping them, so they don't go crossing and go down the river and die. I believe, if we take away those intakes, there's gonna be more rescues up there with the tourists, because they don't know. And obviously it's a secret place, they like go check 'em out. And they come back, the river's high. I think just had a lady or a man, tourist, couldn't wait for the water to go down. I guess he wanted to go back to his room and take a hot shower and they tried crossing, went down river and then passed away. So, I just believe there'd be more rescues, more people dying if the intake is lost and all that water comes down the river. That's just from my experience. Mahalo.

#### **10) Shelley Paik**

Hi, my name is Shelley Paik, and I was born and raised here on Kaua'i. I live in Wailua homestead and I've lived there pretty much my whole life. Growing up, my friends and I used to hike down to the river and from our homes we used to go fishing and exploring. And then when we got older, we used to utilize the ditch system to swim and cool off during summers. You know, I do believe that there's enough water for all of us. And I think that KIUC helps to maintain these ditch systems and roads, which allows the access for local families to enjoy these recreational activities.

#### **11) Jerry Ornellas**

Good afternoon. My name is Jerry Ornellas. I'm a farmer from Kapa'a Homesteads, and most of what I know about this plantation system is first-hand. I've walked most of these ditches, cleaning the tunnels, walked over the flumes. I would respectfully request you consider the farmers in your deliberations. We try to be good stewards. We understand the importance of healthy watersheds. We absolutely understand the importance of healthy streams, and we applaud your efforts to establish stream flow standards. In your deliberations in the wailua area, bear in mind that this water, some of it, supports farmers in the Kalepa area which is managed by ADC. It's an area that's just beginning to take off now. We have new farmers coming on, on a regular basis. There's 6,000 acres of land there, about 4,000 of it is agricultural land. About 1,000 of it can be irrigated. If these systems are demised, there's absolutely no way we would ever be able to restore that. So again, I respectfully request that you consider the plight of the farmers. Thank you.

#### **12) James Parham**

Thank you for the chance to speak. I'm Dr. James Parham, the Director of Research and Development with Trutta Environmental Solutions. I have a Ph.D. in Biology where I studied the relationship between streamflow and native Hawaiian stream animals. I've studied these animals across Hawaii for much of the last 20 years, including 10 years with Bishop Museum as

a hydrologist. And I worked very closely with the state and federal scientists on these tasks. One of my projects was a 4,000 plus page atlas of all the watersheds and their aquatic resources across the state, in conjunction with the Division of Aquatic Resources. And following that up, we developed a model, the Hawaiian Stream Habitat Evaluation Protocol, to determine the impact of streamflow on, or stream modification, on the native stream animals. And this was co-authored with eight Division of Aquatic Resources biologists. In 2013, we used the HSHEP model that I just described to assess the impacts of the Upper and Lower Waiahi hydropower plants on native stream animals for KIUC. Recently, my company was contracted to update this model for the hydropower plants and to complete field surveys throughout the North and South Forks of the Wailua River. We have completed fieldwork where we sampled stream discharge, water quality, instream habitat, and species occurrence. On the North Fork, we observed native stream 'o'opu below the major waterfalls, yet did not observe any 'o'opu above the falls in six different sampling locations covering several miles of stream. The instream habitat and water conditions are excellent in much of that area of the North Fork Wailua River, and not seeing any animals is kind of surprising in terms of the water quality. In addition to the large waterfall that's restricting passage, there are smallmouth bass throughout that section and it's likely that the predation by the smallmouth bass is limiting the suitability of the habitat. We did observe the native shrimp, the 'ōpae, above the diversion. We saw very few below the diversions, and we additionally surveyed the ditches and tunnel between Blue Hole, Waikoko, and then down through the South Fork diversions and observed many of the native fish, shrimp, the 'ōpae, in the diversions, so it's likely that a number of the 'ōpae above Blue Hole diversion are coming through the diversion system from the South Fork. We did not observe any of the endangered snail in our surveys on the North Fork, and we just completed this past week the rest of the surveys, so we'll see what we see there. We will use our latest survey data to update the habitat model for the assessment of the hydropower plants on the North and South Fork of the Wailua River and expect the report to be completed in the next few months. Thank you.

### **13) Bonnie Bator**

Aloha. I have been blessed to live in Hawaii Nei for over 46 years when haoles was one minority. And it's a little disconcerting to me that you folks had the KIUC part of your powerpoint. It seems a little like conflict of interest. I'm really concerned with your current climate periods run from 1984 to 2013. Yeah, things were way better in 1914 and I remember when it used to rain every day. We'd have our tradewinds and in my paper I'm going to give you is a study about frequent drought here in the last 30 years. And I think that CWRM needs to address the climate change aspect and factor that into your facts and figures. With Joule Group talking about designs for continual flow, immediate release, push the water out regardless of the flow, seems not quite right. I'm not a rocket scientist, but I do appreciate the opportunity to give testimony and that you folks have restored the continuous flow in Waimea and also the four West Maui mountain streams are now protected. On that note, I urge you folks to continue to protect and preserve the splendor, the customary, traditional, cultural uses of Waikoko and North Fork, the Wai'ale'ale Stream, continued watershed protection, sustainability, water security, especially climate change. It does not rain like it used to. It used to rain day and night, sun, shine, rainbows. I remember when Hanalei was all waterfalls and yeah, now we get the deluge like we experienced in April. Like in 2006 when it rained for 40 days and 40 nights, so we're in periods of extreme deluge of rain and then drought. I mean, and acid rain we're getting with Tutu Pele and the eruption over there. It's not the same, so I hope you folks can take that all into

consideration. And I have this in my paper, the decrease documented in frequency of Hawaii's northeast tradewinds, because we're getting now east trades which don't bring the rain and the water. So, as you well know, water resources are of great importance and please establish policy which ensures the long-term protection. And mahalo, I'm a grandmother, and mahalo for your valuable time, and please look into the climate change and make that part of your powerpoint. Mahalo.

#### **14) Brad Rockwell**

Aloha. My name is Brad Rockwell. I'm the power supply manager for KIUC. I've been in this role since 2005, and in that role I've been responsible for, among other things, compliance with KIUC's revocable permit to use the water diverted at North Fork Wailua and Waikoko. I've overseen operation and maintenance of those diversions, the waterways, and the hydroelectric plants for those 13 years. Over those 13 years, I've personally inspected every stream diversion and many of the tunnels on the system too many times to count. I've hiked the entire ditch system from the Grove Farm side to the Blue Hole side and back multiple times. I've hiked upstream and downstream of the diversions multiple times including walking up from Maheo Stream to the North Fork diversion. I have also visited many other downstream diversions, stream reaches, and roads in the Līhu'e-Koloa Forest Reserve. During all of that time, the past 13 years, over 90-percent of the general public I've witnessed using the system have been tubers mainly going over to Waikoko through the tunnel. That significantly would be impacted if the water diversion amounts were to change. Those tubers have largely been local families that go up there to enjoy recreational use and enjoyment of the water resource. KIUC has always been and will always continue to be a responsible steward of the waters of Wailua. We use it to generate renewable electricity for the benefit for all of Kaua'i's ratepayers. The system produces 1.5 megawatts. It's our lowest-cost generation source by far. The savings, of which, are passed directly through to the ratepayers since we are a not-for-profit cooperative. We contribute to the State mandate. We have a mandate of 100-percent renewable energy by 2045. The system displaces 675,000 gallons of diesel coming to the island every year. It also saves the ratepayers 1.7 million dollars annually compared to the price of diesel. We return all the water, unaltered, back to Waiahi Stream which becomes South Fork Wailua, where at the confluence of Stable Storm/Waikoko, 'Ili'ili'ula, and Waiaka, and Waiahi Streams, South Fork Wailua River then becomes Wailua River at the confluence of the North Fork near Fern Grotto. We've heard it said that KIUC should just abandon the hydros and put up more solar fields instead. That's not a valid strategy, as there's a huge difference between hydro and solar. The hydro plants are half the cost of even our most recent and newest solar and storage projects. The footprint of the Waiahi hydros, or any hydro, is much smaller than a solar field with comparable power generation. Hydropower is reliable 24/7 and has a much higher capacity factor, whereas solar only produces energy during the day. Waiahi hydros have at least a 100-year useful life and solar has an estimated 20- to 25-year useful life. We need a diversified portfolio of renewables if we are to reach our 100-percent renewable energy goal for the island. I support the State process and the setting of an IIFS for West Branch of North Fork Wailua. I respectfully ask that the IIFS consider continued beneficial use of renewable power production. Mahalo.

#### **15) Robert Cremer, Jr.**

For the record, my name is Robert Cremer, Jr., lifetime resident. Born and raised on the west side of the island and moved, in fourth grade, to the Kapa'a side. I'm not a native cultural

practitioner, but I'm a practitioner as far as subsidy. I believe that the diversion does not hurt our stream. I gathered in that stream from when I was in fourth grade 'til now, and I still can gather there. The problem is the invasive species that are affecting our streams, not the diversion of the water. I believe in cultural practicing, I believe in farming, I believe in diversified farming, I believe in supplying electricity to the people. People need to know that we need balance in life. Everything can't be one way. We can't put the water back in the stream at 100-percent after 104 years of it being diverted. I support the diversion, and I support how it is right now. But what I see with my own two eyes. Like I said, I sit on the GMAC, the Game Management Advisory Commission at the State level. Every two months I go to meetings and I'm part of an advisory commission. And when I go there, I know everybody has plants, we talk about animals, always I testify that we need balance, and I ask you to give that balance to the whole community. Because the water is the people's water. The people's water. So, agricultural people is people, the tubers are people, KIUC is people. That water goes under the tunnels across to Kalepa to even feed the water for the cows on that side of the mountain. That water can be traveled across to KBR, Kaua'i Beach Resort area, and agricultural lands if we need that water. I think we need to be more sustainable and with that water going in that direction is a good thing. Thank you.

## **16) Eileen Kechloian**

My name is Eileen Kechloian. I'm a resident of Kaua'i and a member of KIUC. I've come here to talk about something that I hadn't seen talked about in the instream flow and that's the aquifers. How have the instream flows been affected by the diversions and what the difference will be when you restore instream flows to other parts. I believe that in Līhu'e right now, they're going to be doing a lot more housing development per our plan, our new General Plan. So, they are now drinking surface water, which according to the source water assessment project, is the second best, that they should be drinking water from an aquifer that's cleaner and is just a better source for them. So the only way the water is going to get to the aquifer is somehow from those ditches. That you can't expect an aquifer to recharge if all the water is channeled, very specifically, into ditches. It needs to be spread out, like a normal stream does, it goes out into multiple tributaries. Now, the other thing is, I haven't heard anything mentioned about the fact that as the Blue Hole comes down and gets diverted it goes over the first powerplant and heads towards the second powerplant. There are four streams that come in that have all been diverted by Grove Farms on private property. Now in 1987, because it was such an overwhelming project, they just said we'll set instream flow at status quo. So there are no permits for those other four streams and I don't know how they're impacting that stream, but all those waters need to be spread out evenly to some degree so as to recharge our aquifers. What happened, I'm not sure you know, an aquifer is drained like as what's happening in Līhu'e, that lots of the wells have gone dry. And one of the well drillers is telling me that he's drilled mostly wells up there and not found anything. Is that the seawater level comes up, salt water, and so it forces up the drinking water and the drinking water can't force it back down. The saltwater can keep coming in. When you go and you drill a well and you hit seawater and start pumping up the seawater, you're going to disturb that aquifer and you're going to have brackish water. So we need the water that has been channeled, which can't recharge that way, not very much anyway, or been all sent to a reservoir, but also even though the reservoirs here are earthen, they recharge to some degree, but it's all being held there. And that isn't really helping our aquifers. I attended a presentation by the University of Hawai'i that was presented for the County Council here, and in that presentation we were told that our aquifer would not be able to produce, I think it was like

10 million gallons a day, we'll be short in, I don't remember the exact time frame, 20 years, something like that. They said the reason that we're going to have an aquifer problem is because sugarcane goes out and so all the fields aren't being irrigated. Because they're not being irrigated, our aquifer is not being recharged. So let's recharge our aquifers for everybody. Thank you.

#### **17) Kip Goodwin**

Hello. I'm Kip Goodwin. I'm going to read testimony prepared by my wife. Her name is Sharon Goodwin, who could not attend. Wai'ale'ale Stream and Waikoko Stream uses are consumptive. Their waters are not returned to the stream of origin, the North Fork Wailua. Therefore, KIUC's RP7340 application for 65-year lease needs to meet the highest level of scrutiny for water use. An EIS not yet begun, two public meetings not yet planned and scheduled, a Conservation District Use Permit not yet begun. KIUC's revocable permit has been held over 16 long years while dry stream has resulted. Traditional Hawaiian cultural practices could not take place, and if they could, only under adverse conditions. An experience greatly diminished. This was the diversion. As you can see, we're walking across the diversion and we're walking on rock and rubble and gravel and you can also see that there's no water flowing across the diversion. You look down and there's a bone dry stream as far as the eye can see. This is the dam. Deteriorated concrete, exposed rebar. Anyone there for recreational purposes or cultural purposes, there's a real hazard. And if KIUC is in charge of maintaining this place, they're really falling down in their responsibilities. To reiterate, Hawaiian cultural practices did not take place, and if they could, only under adverse conditions and experience would be greatly diminished. Here they are doing an 'oli anyway. Thank you.

#### **18) Shawn Shimabukuro**

My name is Shawn Shimabukuro and I'm with Grove Farm Company. We are made up of three sugar plantations, the original Grove Farm Company was founded by George Norton Wilcox over 150 years ago. Today Grove Farm includes the former Koloa Sugar Plantation and portions of the former Līhu'e Plantation. The farmable lands were once primarily devoted to sugarcane production. The Grove Farm of today continues to operate and maintain the aging and complex water systems that once supplied a crop that required a lot of water. With the demise of sugar, the necessities to impound water was significantly reduced and water was returned to the stream and other natural waterways. For example, the usage alone in the Hanamaulu Ditch dropped by 44-percent when sugar ended. As much as Grove Farm has been condemned by a few, the water that flows through the streams and waterways are actively used by farmers, ranchers, civic centers, commercial and industrial entities, and more importantly, these water systems provide for our daily needs. Showers, cooking, washing our clothes, and so forth. With access to new groundwater being a challenge in the Līhu'e area, the surface water from the Kapaia Reservoir a source of the Waiahi Surface Water Treatment Plant which purifies water for drinking and that serves over 15,000 residents from Puhi through Kapa'a. These water systems also provide for commercial entities such as Costco, the Kukui Marketplace. Irrigation water is also supplied for civic uses such as the Līhu'e Beautification Project that runs along Ahukini Road and the Kapule Highway, the State Judiciary Complex, police station, the Vidinha Soccer Field. The irrigation water will also provide for the Adolescent Treatment and Healing Center. It provides water to Kaua'i Community College as well as Island School. So all of these uses result in a significant conservation of our potable water resources and keeps our island green. The water has also

provided for industrial uses including KIUC's Kapaia Water Plant and the Global Algae Innovations research facility. You heard from Kaua'i Backcountry Adventure who uses the ditch system for their tubing activities and in turn it provides for numerous jobs and related economic stimulus. KBA has also been a great partner in maintaining the ditches, tunnels, and roadways. And finally, agriculture. Agriculture was and will always remain at Grove Farm's core. In the Līhu'e area alone, we have over 3,800 acres actively used by 65 farmers that benefit from these water systems. These include ranchers, vegetable farmers, such as taro, mixed greens, much of which is sold at our local farmers market and can be found in our local restaurants. We have a variety of fruit farmers, tropical flower growers, landscape nurseries. All of these agricultural activities provide jobs and contribute towards a sustainable food source. Water is also provided to the State's Agribusiness Development Corporation lands and the system once delivered water and it's still able to provide water to the Department of Hawaiian Home Lands in Wailua when it is needed. There is no reason why Grove Farm would utilize any more water than what is being currently consumed. As it is, this complex water system requires daily monitoring and maintenance, and it comes at a very high cost. We recently repaired the Kapaia Reservoir Tunnel at a \$1.1 million cost. This tunnel serves many commercial entities, provides for our farmers and ranchers, as well as potable drinking water. Today's Grove Farm team is a team of 13. All of us have roots on Kaua'i and we were raised on this island, and we take our stewardship of the land and its resources very seriously. This team of 13, along with many of our contractors and partners, pride ourselves in taking care of these resources as we want to ensure that they'll be there for future generations. Our vision is really to build a sustainable Kaua'i. Thank you.

## **19) Millicent Cummings**

Aloha. My name is Millicent Cummings. Much of the past 17 years of my life has been spent here. The main thing that I really want to convey is that Hawai'i is the endangered capitol, species capitol, of the world. We have more endangered species here than anywhere. When you divert water without knowledge, without having consulted Hawaiian practitioners, kanaka maoli people with a far greater awareness of relationships than anyone who's ever visited here, I can probably say with great, with surety. When those libraries are not consulted, big mistakes happen. We've seen many of those mistakes, and we're going to see a lot more of them. And things like PGV on Hawai'i, Pele is very articulate, she just went right around, took out what she needed to take out. Tutu Pele is an example, just like the water, of having an awareness of what's not being taken into account because it's not about money. It's not, you cannot think about it in terms of smart growth. Extinction is not smart growth. And without proper respect paid to the kanaka maoli on top of whose land you stand, nothing can be sustainable in what you're doing. Nothing can have lasting intelligence and you're inviting disaster, I feel sure. Based on scientific thought, looking at history. And time and time again we see these mistakes being made from an arrogant patriarchal perspective. Who, what, wants the resources? So with that desire, the real needs of the people are swept under the rug and it's no different to me, this continued diversion, is no different to me than killing all the buffalo to starve out the Indians. How can you plant your kalo when there's no water. So the primary focus I feel for you guys is it should not be on the bottom of your list on one of these many, many pages. Cultural uses of water? Cultural uses of water means survival for the kanaka maoli, who is an endangered species. And so without this respect, I feel like you're inviting doom, not just to all that is involved in these alterations, but all who live here and all who come here, and all future

generations, because you're affecting the weather. You're tampering with divinity here, thinking that you are quite capable of doing so, much to the unfortunate... You just have to start with the kanaka maoli here, not just include those needs in your many pages of reports and assessments. And I know it costs a lot of money for all this to be going on. A lot of people could be not in Las Vegas right now trying to earn a living because they can't afford to be here because the water has been diverted. Please have respect for the water. It's life. Mahalo. Mahalo ke akua for the water. Mahalo to the kanaka maoli people for teaching you guys what you need to know.

## **20) Felicia Cowden**

Aloha. I'm Felicia Cowden. I brought my 3D map because it's a lot easier for me to actually work with than a flat one, for understanding. I've probably only been up in that area maybe 50 times or less. I definitely have spent time up there, often with my students or my kids who were up there enjoying it, but we're also learning cultural history and then watershed management and I had a school. But overall what I would really like to see is something like what has happened with the Waimea River where there is a facilitated agreement. I think it's really critical that water is permanently returned to the watershed on a regular basis. You know, that it is an all the time streamflow. I think that... I don't have the experience of some of the people in here, but you know, to me like with Waimea, the goal is 50-percent. I recognize that there's a lot of dependence on the far side of the diversion and that there's value in continuing to bring that water over there. But like what you can see here, where it goes over behind Kalepa Ridge, one thing that's kind of interesting is going to be pretty rough change when we have 240 acres here for a landfill. It's probably going to reduce what's needed over there again. What I can point out is these tables in between, but if you look at, there's a whole ridgeline where it's separated. And so, what I've done is look at the photographs of what was 100 and more years ago, and in Wailua there, where the Department of Hawaiian Home Lands is coming down above Lydgate, that used to all really abundant and wet. And we saw verdant lo'i and a lot of deep abundance in that area. And I think that we really need to bring that back. And as some of the other people have been speaking about both as an obligation and a commitment to the appurtenant water rights of what could be used there, but also as we are hearing about aquifer recharge. We have problems in many, many areas now, we have so many wells drilled, but we're showing less and less water in our aquifers. And it doesn't take, you don't have to be a weather man to know which way the winds blowing us, Bob Dylan said. And I think that when we look at the diversions where they're basically like two stacked rain gutters, if it takes all the water out, it's really going to be influencing it. I've been up there more recently, where the water, the boards aren't as high as they once were, so it's continuing to flow down. And that's why those other four streams that are in there. I think all of that is a really important aspect, and I think that when we look at what is coming out of Waimea, I'd really like to see us work hard to do something like that. I appreciate hearing Grove Farm speak and acknowledging that they do take care of those ditches. And I acknowledge those very important ditches continue to exist. But when we have so much of that water returns to Hanamaulu. Like people are looking here on a flat map, it looks really close, but what you see in this flat map, I mean this raised map, is a completely different area. And it's essentially holding capacity away from Wailua and taking that potential over to the Līhu'e area. And that needs to change I think. It needs to be more shared. So, I wanna leave this. Is it OK if I leave this map up? I want to maybe move it in a different way so people can actually use it, because it really changes the perspective when you're looking at it where the water flows. Doesn't show on a flat map. Also, on the cultural pieces, when we see

that there is no culturally significant streams on Kauaʻi. We need to change that also. We need to get the history in there. We can work with the historical society, plenty of people, because that also disadvantages our water choices by not having that really critical piece of information. Thank you.

## **21) Jade Moss**

Aloha. Thank you for hearing us today. I'm Jade Moss. I live Kalaheo. I have two young children, and I like that the instream flow standard should be set on what the lowest reported water flow, so that we can ensure that nothing goes dry again and that we'll always mauka to makai connectivity. You know I do appreciate the hydropower alternative energy sources. Like I do appreciate having hot water to take a bath in and to have clean water to wash my dishes. But since it had been brought up earlier by a couple of people. For the long-term use permit by KIUC, 65 years is a very, very long time. Nobody that is working at KIUC today will be working there in 60 years from now. I know they can't operate in good faith, but that's a very long time to grant a permit for. The mission statement, the end of your mission statement, was that the people, just like we're setting standards for the instream water flowing, I think we need to set standards for corporate profits and cap corporate profits. Anything above that we go to social programs. Kauaʻi, for example, is the only island that doesn't have a principal fund setup to give scholarships to families and things like that for preschools. That's all out of pocket, unless you are of Hawaiian heritage or if you're four years old through Patch Open Doors for example. Lastly, I do hope that you can work with the Department of Hawaiian Home Lands to acknowledge that there is plenty of water to build, finally build, the Hawaiian home lands there in Wailua that are part of the plan. Because it's all connected, water, affordable housing, everything. I think Hawaiian home lands is the ultimate in affordable housing. We need to get that built first and foremost. Thank you.

## **22) Don Heacock**

Good evening. My name is Don Heacock. I'll keep this brief. I'll submit my written comments later. I first want to commend the Commission on your recent East Maui recommendations and I also similarly recommend that Waiʻaleʻale and Waikoko streams be designated as significant taro, kalo, streams. In 1848, there 38,000 acres of kalo here on Kauaʻi. The Puna District had 3,000. Wailua watershed, which is a little over 60,000 acres, as big as East Maui had 1,000 acres of taro. I agree with Jerry Ornellas that we need to protect farming. There is no farm crop more resilient and more sustainable and more culturally, economically, and environmentally important than taro. It's multi-functional. It produces food, it functions as the kidneys of the wetlands. It provides habitat for three species of endangered waterbirds, and it recycles organic waste and protects the coral reefs by keeping mud and woody debris and leaf litter off of the coral reefs. The problem with the General Plan is it did not include the water use and development plan. This has been our inherent problem in Hawaiʻi almost as long as I can remember because land use planning has been allowed to precede water use planning. Water use planning should be first. We are following a Californication model where we're diverting water from one watershed and taking it somewhere else. In general, Hawaiians never did that. There's only one watershed I know of in all of Hawaiʻi where Hawaiians move water inter-basin. We should stop that practice. As you know, it's the baseflows that determines the carrying capacity of streams. Not the high flows. High flows can increase by 25,000-percent. The other thing is we keep hearing from KIUC, many of the Board which make more than the President of the United States, as a

non-profit organization. I'm a KIUC member. You have to realize that the American Fisheries Society, EPA, has published dozens of publications on the negative environmental effects of hydropower. You heard Mr. Bissell talk about clean energy. Wainiha, for example, just as an example, entrains downstream migrating adults. They're knocked off the ground by the retro fish screen before they go through the penstock at the forebay. The small ones, they get through the screen, are either killed by the pressure or they're impinged on the turbines. Finally, the water that's released into the tailrace is so super saturated with nitrogen that fish can't live in it. It is not clean energy. It may be cheap if you don't factor in the environmental costs, but it's not sustainable. We need to stop the inter-basin transfer of water. We also, and I want you to, this is constructive criticism, and it's an offer to help you. I've studied stream for almost 48 years of my life, professionally for 38 years. I've surveyed almost every stream in the state. The reason there aren't fish above Wailua Falls is because of the smallmouth bass. The hinana used to go up there by the millions. When I came here from Maui in '81, I interviewed dozens of kupuna from Ipo Haumea to Annie Andrade, I could make a, Mr. Kaohi in Waimea. Annie Andrade in 1949, when she was 10 years old, went with her Hawaiian father, he was a big strong man, up to Waikoko and Wai'ale'ale, they came back with two 80 lbs. bags full of 'o'opu nakea. The only fish in Hawai'i that Hawaiians named a god after. Kind of culturally important I would say. Also excellent eating, but I wouldn't put that in our paper. So we really do need to restore 100-percent of the instream flow to Waikoko and Wai'ale'ale as significant taro streams. We can't restore those lo'i until we get water back. Its kid of the chicken or the egg. I'll send my written comments in to you later. One last comment is this issue that's very difficult to measure, is the aesthetics of waterfalls. Two things come to mind. Christian Lovell from Anahola in 1982 told me that his grandfather in 1923 went out to pray to the rising sun and check on the water in his lo'i and they were all dry. And he look mauka in the mountain, the mountain was black. He knew it was raining mauka. He walked and he walked and he walked for four hours and he came to what he said, a vandalization. There was a concrete weir completely across the stream that said Lihu'e Plantation carved in the top of it and it was taking all the water. The whole river in the lower reaches had dropped vertically three feet and he couldn't get water into his pani wai. Couldn't divert water. That happened all over Hawai'i. The vandalization took place in the '20s, and so that's a perspective I want you to think about. Lastly, the issue of the SPAM report. You've been trying to complete the SPAM for over 20 years, maybe 25 years. I would offer and encourage you putting together a technical advisory group, made up of not just over or two people from the Division of Aquatic Resources, but all the district aquatic biologists. And we can help you help the public restore these public trusts. One of the big confusions I've seen here tonight was that, sounds like in general, people don't understand the difference between public trust beneficial uses and beneficial uses. And that needs to be clarified, because there's a huge difference between the two. Thank you.

### **23) Alan Kekoa Hoffman**

Aloha. I'm Kekoa Hoffman. I don't really know why I'm here, but I know I'm here. I love all you guys, I just want to say that. I understand that nobody here is doing anything out of ill intention, and the hardest part I have coming to these meetings, or any of these things is that I feel this passion, or this angry, this rage inside of me the way things have gone so astray [inaudible], so I just want to make you guys know that. I feel like this whole thing is a huge, it's two completely different world views. It's western society, money, consumption, making profits, making money, and the indigenous perspective that what I truly believe is that one

diversion is one diversion too many. And if we really, if we look at the way that our world and everything is going, and the climate and everything, I think we need to take it very seriously that we need to do everything we can within our power to go back to it being an ahupua'a system and restoring all of that. I was born and raised at the base of Makaleha, Kapa'i, and I was homeschooled 'til ninth grade when I went to Island School. But I've basically spent my entire life at the river there and at the springs there and I've just watched so many of the endemic, endangered plants and species just getting pushed more and more to the brink of extinction. And for some reasons, and so many of us local people, like the man who runs the Kaua'i Backcountry Adventures, is saying he's trying to provide better opportunities and locals are working three jobs just to survive. I understand he believes he's doing something good, but we are importing so much of our food and we used to provide just off of our 'āina, off of our land here food for way more people that live here now. And so I don't really know how we get back to that, but I think it really goes to us not just saying, well this is the reality, and you know the plantations diverted this so long ago, and so we're just going to keep diverting all the water and we're going to just keep doing business as usual. And I just hope that we can all come together to find ways to get all of our people back to the land and stop pushing us all out. That's basically all I gotta say. Praise be to god. Thank you.

#### **24) Hope Kallai**

Aloha. Hope Kallai. I wanted to address the revocable permit and the 65-year lease application that state it's a non-consumptive use. The State has determined that this is a consumptive use of this water. It's transported 5 or 6 miles and 500 or 600 ft. downslope. Not a drop is returned to the stream of origin. That's why we have all these competing downstream uses and tubers and Grove Farm, and all these people thinking they get, they're entitled to the water that is supposed to be returned to the North Fork Wailua. Not the South Fork Wailua. It's a 100-percent consumptive use of this water and the application and the revocable permit state non-consumptive. There's a big problem there. I also have a problem. This half of the room doesn't know any stream here called WBNF (West Branch North Fork) Wailua. We know this water as Wai'ale'ale Stream. And it is our most sacred mountain. It is our most sacred water. And to come here and talk about WBNF Wailua makes no sense in cultural practitioners' minds. How can we discuss something with the wrong name. And I request that this water will not be called Blue Hole diversion. It will be called Wai'ale'ale dam and diversion, because that is what it is. It is not the North Fork Wailua. North Fork Wailua doesn't begin 'til further downstream. This is a diversion of Wai'ale'ale Stream water which is sacred water to cultural practitioners and every hula dancer worldwide and it needs to be considered as such. Not WBNF. We don't have a stream called WBNF. Please address it as Wai'ale'ale Stream. CWRM really needs to consider this application, because it is not in compliance with HRS 171-58 which states non-consumptive use of water and it's in the Conservation District. So, I hope this is, gets serious turn-around look at scrutiny with some legal eyes because you can't apply for water and say it's non-consumptive and not a drop is returned to the stream of origin. So, please call the stream Wai'ale'ale Stream and not WBNF Wailua. Thank you.

#### **25) Susan Strom**

Aloha. Susan Strom. Wailua Homestead. I'm a dual citizen. I have children and grandchildren on this island. And my whole purpose for being here, aside from the cultural history and community, is that really the better island that we have currently. One thing that concerned me

in some of the language by one of the KIUC officials was the word entitlement. And to me, being able to divert the water, use this water, is more of a privilege than an entitlement. Because I think the entitlement belongs to the original cultural hosts of this island, and that would be the kanaka maoli. And I think that close conference with the kanaka maoli of how these waters are to be utilized for the benefit of the entire community is something that should be considered at all levels and not left out, paramount. Anytime you tamper with the water, the natural forces of the stream, you are tampering with climate and there's no way around that. And I have seen, just in the last decade, the dramatic change shift in the environment and the climate and it's very disturbing. And it's frightening. Our children are frightened. So I think on all levels, we need to come together and find a way to remedy this without drawing anymore from the streams. You talk about being 100-percent renewable by 2025. What about those renewable energies. It just seems to be a little bit of a diction to hydroelectric power, and hydrology, power usage. I'd want to know why is that necessary, when we have all this new technology out there and the footprint, even with solar, is not as large as one of the other officials said it was. There are new technologies, just thumbprint size solar usages that are just amazing. The technology is just expanding and just exploding, so there are sustainable technologies that they leave a much smaller footprint. And are not necessarily more expensive. So, it just seems like there's a real reluctance to withdraw from the hydrology. I don't understand that. I certainly would like more answers regard that. I guess that's really all, except I would like to say in closing, that I really feel it's paramount that we have 100-percent of the natural flow restored to the waters and with all due respect, I think that once they are restored we'll see a tremendous positive shift in the environment and it ends well, I think.

## **26) Debra Kekaulua**

Aloha everybody. My name is Debra Kekaulua. I'm wanting to make a couple comments. I see that we are very well represented by very smart, educated, even credentialed people in the audience. And, the word entitlement just came up, which is a really key word. It seems like everybody's entitled, or they make themselves that way. I wanted to point out specifically this paper right here. Has every corporate name plan, A to Z practically. Maybe we're missing Zuckerberg or Omidyar. But every one of the people that are listed here, yourselves included, most of the people in the audience that are Grove Farm, KIUC, you're all corporations. What you need to do, in my eyes, is become profit-sharing corporations and put an arm in there, not only for your employees, which profit-sharing supports, but that arm collectively would fix Kaua'i. I don't know if that makes sense, but if there was a way that all of the corporations, we're talking military all the way down to the floor. Federal, state, county, everything, change over to profit-sharing. We're already, as individuals, in our taxes, we're already floating. There's people leaving the islands, because they can't afford to be here. I would gladly give up my space if it meant that there was a kanaka maoli coming home. So again, my comment would be a reminder that all of you folks are representing corporate whether you're an LLC, non-profit sharing. And until the judiciary or the government can produce a valid treaty of annexation, political military USA isn't going to fly here anymore. Water, the new gold. You guys all have to wake up, because it isn't going to fly any other way. We have to be restored back to some semblance of normalcy on this island. I came here in '71. I had been here in '58 and '59 with my dad as a U.S. Air Force brat. And my dad sat at the negotiating table with all the other military political people regarding this statehood issue. It was only in 2011 that, 20 years after he passed, my mom passed, and I got ahold of his top secret documents that itemized all of what

I just said. This corporate structure that includes everybody. All the CEOs, everybody. One of the final statements is that we are, or we have been, taken over by the corporate, and the newest example of that is the Waikiki beach boys. Thank you very much.

## **27) Noa Mau-Espirito**

Aloha. My name is Noa Kaneali'i Liapono Hi'i Mau-Espirito. I'm here to notify the State of Hawai'i, Commission on Water Resource Management, Commissioner Susan D. Case that under U.S. Law by they the State of Hawai'i retain jurisdiction over protected persons and protected property that they are in direct violation under U.S. Constitution Article VI Section 2, Supremacy Clause and War Crimes Act, U.S. Code Title 18 Section 2441, therefore making them, the State of Hawai'i, felons under U.S. Constitutional Law. Also, I'd like to let you guys know the entire ahupua'a of Wailua is Crown Lands and private property to Kamehameha III himself, his heirs and successors subject only to the rights of tenants which the State of Hawai'i, Grove Farm, or KIUC is neither of. Because they are a corporation and not a living breathing person. Under U.S. Law Title 18 Section 2441, War Crimes Act U.S. Public Law 104-192, 104<sup>th</sup> Congress, enacted by Congress, states that any breach and violation of the 1949 Geneva Conventions is a felony under U.S. Law. The appropriation of property by Kamehameha III Crown Lands private property is a violation of the 1949 Geneva Conventions, therefore making it, and making the State of Hawai'i felons under U.S. law. I would recommend that the State of Hawai'i to uphold Constitutional law and to show respect to Kamehameha III families that have interest in the property and to also show respect to the people and chiefs of this country. And that they the State do not move water from one ahupua'a to another. I would now like to notify the State of Hawai'i that any further unlawful undertakings and diversion of water and appropriation of Kamehameha III Crown Land property and retention of jurisdiction over internationally protected person under U.S. Law will result in legal proceedings in federal court for violations of U.S. Law. If anyone would like to contact me, please do. You can contact me by email at [nkealiipua@icloud.com](mailto:nkealiipua@icloud.com). For me, the problem is you guys that, if you guys are simply upholding these laws, the U.S. Constitution, we would not be here talking about culture. I feel like if I come here talk about culture, I wasting my breath and my time. You guys, bottom line, uphold the U.S. laws. No come over here, make us talk about culture, when it's not about culture. It's about holding up the U.S. laws. The State of Hawai'i came here through the U.S. federal government. Therefore, you guys are liable, accountable under U.S. federal law. Again, I recommend you guys, please show respect to the families who have interest in this 'āina. Aloha. Have a good day.

## **28) Debbie Jackson**

I just want to say that I support everything that Noa just said and that it's very important that the water be returned to the rivers. This river that we're talking about, especially the, what you call the North Fork, the Wai'ale'ale Stream and all of those streams that are cut off. Wailua River needs water. It needs the flow. It's got a slurry of bacteria down in the bottom, the kids are getting sick with [inaudible] and staph. The freshwater is needed to, for the coral to survive out there. I mean this is all about nature. This isn't what I see. It shouldn't be what I see that it is like other have said it's corporate and they want it to be all about money. This is nature and how are we going to live. How are we going to live, and our children, our grandchildren, and their grandchildren. How are they going to live if the water is not returned. Thank you.

**29) Jesse Brown-Clay**

I'd like to forego testimony. Thank you.

**30) Adam Asquith**

Aloha. My name is Adam Asquith. I'm currently a taro farmer. I make my living off diverting water, so I'm not against diverting and using water to the contrary. That's how I survive to feed my family, my friends, and businesses. What I'd like to talk about today is a sharing, and that balance that Mr. Cremer talked about. Somebody brought up the issue of entitlements. I'd like to talk about that and alternatives. So, sharing the great book, I think most of us have read [inaudible] titled something like Everything I Didn't Know I Learned In Kindergarten. There seems to be a lot of people here that flunked kindergarten, because taking all of anything is not a lesson they teach you in kindergarten. It's about sharing. And the way the waters have been managed and these plantation diversions is not shared. It's not shared period. And the reason they need to shared is that there are entitlements under State law. There are protected trust uses that can be viewed as entitlements, right. The cultural uses and this bridges into the issue of alternatives. One of the reasons that those protected trust uses are entitled to the water is that they have no other alternatives. The water that flow from the summit of Wai'ale'ale and follows the line of heiau from Ka'awakō to Hikinaakalā at the beach. That is the only water that flows from the summit to the ocean in that watershed. There is no alternative. It bears that mana that comes from the top of the mountain to the ocean. There is no alternative to that. Fish live in the water, in the streams, so when you take out the water, the fish has no alternative, and the iteration goes on. As a taro farmer, the taro needs the water to produce the yields we need, to the quality of the poi that we need. There are no alternatives to those protected trust uses. They are entitled to the water. KIUC is not entitled to the water. What you need to do, is you need to hold them to the examination of alternatives. The law says, yes, they can ask for the water, but first they need to demonstrate to us that they have no alternative. KIUC has alternatives. Let me demonstrate. Electricity. There no water coming from the Blue Hole tonight to KIUC's hydro. They have alternatives, right. Drinking water. We should never have gotten into the position where Līhu'e, and Puhi, and Anahola, and all our future development is now tied to surface water. Hold them to the standard of alternatives. If our sustainable yield, if CWRM claims that the sustainable yield in the Hanamaulu basin is 43 million gallons per day and we're using something less than 5, where were you guys when Grove Farm setup this surface water treatment plant? When we've got sufficient groundwater. How did we get here? Hold them to the alternative nature, please.

**31) John Wehrheim**

Thank you. John Wehrheim. There was earlier some discussion about the aquifers, particularly in the Līhu'e basin, but it's a situation that's kind of universal around Kaua'i. And that is after the demise of sugar, we had a lot of problems with aquifer recharge and it might be a little counter-intuitive but actually aquifers were a lot healthier during the era of sugar because the diversion, through the plantation systems and the extensive irrigation was one of the sources for the aquifer recharge. It's been most drastic in the Līhu'e area because of the geology of Līhu'e. But we've seen it in other areas around the island. A lot of springs have dried up since the demise of sugar. We've seen that, I've personally seen that in Kilauea also. So, there are some counter-intuitive things about aquifers and about hydrology that I think we need to pay attention to. One of the other issues in the Līhu'e area, now this information I've gotten from USGS, who

have done a lot of work in this area and I've done some work with them. Another interesting thing is that the extensive planting of eucalyptus in the Līhu'e area. You would think that, well since reforestation was supposed to something that would help recharge the aquifer, it's been found that a lot of these eucalyptus species actually evaporate more water than they hold. So while the native forests are excellent aquifer rechargers, a lot of the species that have been brought in to reforest don't necessarily do the same job. And there's been some preliminary recommendations and studies by the USGS saying that it'd be much better, well actually they're recommending that after the eucalyptus forests are chipped and burned for fuel, that we'd be better off with grasslands and pastures. Or way better off with native species forests. Another thing, there's be a lot of talk, well, not a lot of talk, certainly Adam talked about the importance of diversions and Don's a taro farmer also, I'm sure he recognizes points of diversion an dhow to grow taro. So, we all understand diversions and how important they are. There have been some people who've come up here and said they don't want to see any diversions and yet at the same time, they seem to be supporting cultural practices. And there is no taro without diversions. And if you, and Don said some something about, I think, 38,000, 40,000 acres in 1848, well, there have been studies, pre-contact studies by archaeologists and the numbers, the pre-contact numbers of taro cultivation and Kaua'i had more taro than any other island even though it wasn't the largest island, far greater than that. Far greater than that. So, you can just imagine how much water traditionally was diverted from streams on Kaua'i in order to support the Hawaiian people. There are studies done, being done, and there's a lot of work published by Dr. Patrick Kirsch of Berkley and Bishop Museum. Some very interesting work in this area. But I think, and another beautiful thing that Don talked about, is you can imagine when it was all covered with lo'i. What that would've done to the groundwater, and to the springs. Like Don said, keeping the mud and the leaves and the rubbish, the rest of it out of the reefs. How do you keep it off the reefs? You divert it. Ideally, you know, the beautiful vision is it goes into kalo lo'i, but it gets diverted. Thank you.

### **32) Sommer Ka'ua'kahi**

Aloha kakou. My name is Sommer Ka'ua'kahi. I have a couple of different things that are going through my mind that I'd like to speak. First, my name is Ka'ua'kahi. To break that down, ka, the. Ua, rain. Kahi, first. My family, my 'ohana, the Ka'ua'kahi, they come from the very beginning of all legends in Hawai'i. Go, you find it in the Kumulipo. I'm a kanaka maoli. I was born here on the island of Kaua'i in the year of 1987. I grew up in Wailua for the most part of my life. I was homeschooled, so my earliest memories, running around the valleys and foothills of Wailua, mainly from house lots at that time. From about the age of 10 to 15, I explored, played in the streams with my brothers and sisters pretending we were little menehunes moving rocks, trying to keep the waters that only now I know were auwais, ancient auwais. I watched them dry up slowly. And I go there now and they never came back. At age 15, I got my first job working on the Wailua River as a kayak tour guide. At age 16, I started working on the Hulē'ia River as a kayak tour guide taking tourists up the river and then to Papakōlea falls. I saw how the water doesn't move quickly, I grew very in touch with watching, I am fascinated with when it rains, the floods, the way the rain affects the stream flow, and I can predict and watch and know all that just from knowing the water. First of all, also this, you guys, this is wai. This is water, straight from the source, the spring. No more drinking tap water any more. So this wai, I drink, is me and this is the wai speaking to everybody. We are all made out of water. So what kind of water are you guys drinking. You know once all the diversion that are done, are

done already, but I know that you don't need to come [inaudible] something that shown that's not working. When I was 20 years old, I moved up into the homesteads [inaudible]. Moved to this beautiful property that had a stream that came down from Wai'ale'ale. The homesteads actually [inaudible], many homes that we visit in the homesteads will most likely have a backyard, little river flowing through, and only maybe at a quarter of its capacity. Water is stagnant. If there was more water flowing through there, more home, more families could have their own little lo'i back there, their own garden, keep it nice and alive. Also, my family, my father, my grandfather, they were [inaudible] and there's always a connection between everything, not just the rivers all the way down to the ocean, and the corals reefs. I hear stories, when my dad and my grandfather bought fishing poles, where they used to be able to fish so much, now they can't. My dad and his seven kids have to go to work, and his father before they were able to take care of the 'ohana by just farming and fishing. My dad wasn't 10 hours a day to support my mom and seven kids. He died 3 years ago from cancer at age 50 years old. He was a kanaka maoli. Six months ago, my youngest sister, my youngest sister out of seven kids committed suicide. If she was on the land, that would've healed her. Why are we bringing water to places for affordable homes that cost high into the \$400,000. What kanaka maoli can afford those? Only people moving here. Our island has a capacity. We're not growing any new space. You know, so we should really take care of the families and 'ohana that are here first. The water should come to the families on Kaua'i that use the water and need the water. Not just someone who's going to spray down their driveway, to keep their \$400,000 brand new home in Hanamaulu clean, to wash their car. No offense, sorry, just my opinion. My little brother, my youngest brother, is the youngest out of all of us, he goes fishing because, you know, I feel like he keeps his connection to his dad that way, he goes fishing every day. You know where he goes fishing? He goes fishing at golf courses. He catches the fish just for fun, throws them back. How awesome it'd be if young boys could actually go and fish in the stream, provide for their families. He's working how many hours a day, building houses for more people to move here, when he should just be catching his own fish and supplying some food for his own family. I don't want to see the water levels drop any more than they are already, because I know just in my 20 years of observing from young kid to now, I've seen it drop drastically and I don't want that for my daughter too. She's 10 years old, and in 20 years, I want her to not remember the way it is now, but to be even better. I want to see Wailua River flow. Another thing, Wai'ale'ale, that's the head, yeah. Where it flows out all the way to the Wailua. This is me. How are you going to... Think of it like our head, our spine, we got the fluid flowing from our head to our spine. What, you're going to take the fluid, divert it to another space, and then try to send it out the bottom of our spine. That's not life, that's not flow, that's not the way it should be. Appreciate it. That's all I have to say.

### **33) Jan Tenbruggencate**

Hi. My name is Jan Tenbruggencate. I'm on the board of KIUC, elected member of that Board. KIUC is involved in this discussion in part because we simply happen to have the top part of a vast irrigation system. I'm reminded of the Koloa Field System, which was a Hawaiian built irrigation system that provided just a remarkable area of Koloa from the, it's hard to describe, from Lawai Valley all the way across to the other side of the Koloa area, turned what was basically black rock into fertile fields that fed people. Today, Līhu'e Plantation has rebuilt its own irrigation system in part of that area and the Līhu'e Plantation irrigation system water is feeding people today. If you go to the farmer's markets, a lot of that is Wailua diverted water.

The current irrigation system diverts far less water than was taken in the sugar era and the KUC Board last year committed to, as long as that system, part of that system is in our governance, to always keep water flowing the river. That's our commitment and we'll keep that commitment as long as I'm involved. Thank you.

### **34) Ned Leone**

Hi. My name is Ned Leone. I live in Lāwai Valley and I believe that the water belongs in the stream. I don't know much about Wai'ale'ale diversion, but I do know what happened to Lāwai Stream. And I think that the Water Code has been in effect for 40 years now. Since then, I've seen the demise of Lāwai Stream from a live stream to a stream doesn't exist. It's full of moss. It's pretty much on death row. I feel that the CWRM has failed people when it comes to the people's trust and I think it's time that these corporations that are stealing the water for personal gains, it's time for that to end. And it's just a shame that what's happened to Lāwai Stream. I think that the setting inflow stream standards is very important because it seems to be the card that these corporations that are stealing the water have been hiding behind and I'm happy to see that we're moving in the right direction to set inflow stream standards. It's amazing. I've lived on this stream for 42 years and it's just sad to see what's happened and it seems like the Commission has turned a blind eye to these corporations to water a golf course, to have a private fishing pond, to a 1,500 acre development. And no agriculture at all. They're taking it out of this whole ecosystem of Lāwai Valley and putting it into their private development. It's sad and it's just a shame that it's happening. I really hope things get better in the future. I don't have a lot of hope, but it's all I've got to go on. Hopefully you guys will do your job. I'm very happy to have met Ayron. I believe that he's a real person, and I think he's moving in the right direction. So, thank you very much.

### **35) Alan Kekoa Hoffman**

So I don't want to talk too much. First time I [inaudible] choked up there. But, I just hope [inaudible] takes in everything that they've heard tonight. They see like Kauwela Ka'ua'kahi, her family's the first people here and a lot of us it's very emotional, very hard, and I'm trying my best to stay to be like a warrior, not to go into my emotions because it's very hard not to. I guess it just kind of struck a raw nerve when I see so many people that just don't want to maybe look at their own influence in the things and pretty smug looks, or people like John that talk about diversions and how diversion had been done for so long. That's just like another slap in the face to us as a people and the reasons that those, and I'm pretty sure John also works for the hydroplant, maybe made the hydroplant. So it's a pretty big conflict of interest there. We look at like you on O'ahu, all the stream, for the most part in O'ahu, especially by town are completely dried up. And [inaudible] that's where the corporate interests where they want to head Kaua'i to. And, yeah, like he's ended up growing kalo, that's like a huge slap in the face. For whatever was put into the lo'is to grow kalo, but it flew back into the stream and I very strongly and adamantly believe that when we live the right way and water flows as it was meant to flow with a continuous flow with aerated and clean naturally because we were living in accordance with the land that we could literally drink the water at any part of the ahupua'a and it would be clean as it flowed if it was in the right area. No, most people don't even get their water from a spring. Most water is treated when it's very sad, when we live in a place with some of the purist water in the world. But very few people are actually drinking that water because it usually gets diverted, polluted, and then re-filtered and cleaned through a process that's using more of

our resources. And to me, it breaks down to is the diversions of the two different worlds. Is that once its diverted for money and greed and for someone's profiteering over someone else, it's like anything to me, it just degrades and corrupts completely the entire system. Unless you think about the ahupua'a as being a complete system that needs that, the entire system is corrupted, everywhere. And until we put it back in its proper place and really treat it with respect and the right the water and the peoples of this land have, we're not going to go through a good future for anyone. At least that's my opinion and that maybe it'll profit, maybe it'll keep pushing some people's livelihoods or what they have and what they want to cling to, but very soon, if we don't drastically look at what we've done and make changes and go into a better future, we're all going to be stripped of everything we have. And we're all going to be in the place that we are in. Thank you.

### **36) Don Heacock**

Just one point of clarification. Don Heacock. The issue isn't that, I as a taro farmer divert water from the stream, but taro only transpo-evaporates about 5-percent of that water. 95-percent goes right back into the stream. As I stated earlier, I'm against inter-basin transfer of water. Keep it in the watershed. Restore the taro lo'i. The economic, the cultural, and environmental benefits that will accrue by doing that are multiple, multiple. The waterbirds will come back. They'll no longer be endangered like they are now. They're endangered because of the loss of those constructed wetlands, the lo'i. The jobs that it'll create, the food security that it'll restore, how important is food security. Most people in this room have never been really hungry. But the food bank claims there's about 500 kids, mainly Hawaiian children, that go to bed without enough to eat. That is appalling. We need to stop that. So, I just wanted to clarify the issue between agriculture, in general, sugar, none of the water ever went back to the stream and taro, which it almost all goes back to the stream. Thank you.

### **37) Noa Mau-Espirito**

I wanted to let you guys know that, also, I'm in the process of restoring one auwai right below Opaeka'a Falls, same ahupua'a as where the diversions might be. Yeah, so anyways, we are, me and my family's currently restoring one auwai to our family's LCA so we can do our taro patches. I mean, this should like a no-brainer. The culture impact going be major. You know what I mean. But, I really would like you guys to uphold the Constitution and the federal laws. But yeah, just wanted to let you guys know that me and family stay restoring the auwai on the bottom of Opaeka'a Falls so we can bring the water to our family's lo'i. The exact name of the lo'i is Kaleiali'i on LCA 3561. [inaudible] Thank you. Mahalo.

## Testimony submitted directly to the Commission

### 38) Kaua'i Island Utility Cooperative, David Bissell, June 15, 2018

**From:** [Tokioa, Beth](#)  
**To:** [DLNR.CW.DLNR.CWRM](#)  
**Subject:** David Bissell testimony to CWRM re: Wailua IIFS  
**Date:** Friday, June 15, 2018 3:19:22 PM  
**Attachments:** [KIUC D Bissell Wailua IIFS 6.15.2018.pdf](#)

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Please accept the attached testimony from David Bissell, President and CEO of KIUC.

Mahalo!

*Beth Tokioka  
Communications Manager  
Kaua'i Island Utility Cooperative  
4463 Pahe'e Street, Suite 7  
Lihue, Hawaii 96766  
Ph: (808) 246-4348*





June 15, 2018

Ms. Suzanne D. Case, Chairperson  
Commission on Water Resources Management  
Kalanimoku Building  
1151 Punchbowl St., Room 227  
Honolulu, Hawai'i 96813

Re: Instream Flow Standard Assessment Report & Interim Inflow Stream Standards for the  
Hydrologic Unit of Wailua

Dear Chair Case and Commission members:

Allow us to express our appreciation for the dedicated and diligent work of the Commission and its staff in establishing adequate interim instream flow standards throughout the State of Hawai'i. We are particularly grateful for your efforts on Kaua'i: previously in Waimea and currently in Wailua. KIUC is proud to have played a role in the successful mediation of the IIFS for Waimea River, and has been collaborating closely with CWRM staff in their work regarding Wailua.

We understand the importance of your duty to protect the natural resource while seeking to responsibly enable other potential beneficial uses of the waters of the state. KIUC remains committed to being a reliable partner in this effort: we are confident that an adequate IIFS can be established for Wailua that also enables numerous other beneficial uses to continue.

Since 2003, KIUC has operated the Upper and Lower Waiahi hydroelectric plants, utilizing water from the Blue Hole Diversion of the Wailua River via a revocable permit issued by the Board of Land and Natural Resources. The Waiahi hydroelectric plants have been producing energy on Kaua'i for more than a century. Originally built to supply power and water to Līhu'e Plantation Company's sugar operation, the plants now generate roughly 1.5 megawatts of renewable energy, delivering power for KIUC's 24,500 member-owners around the clock.

As a not-for-profit cooperative that is owned by the members it serves, KIUC strives to provide clean, reliable electricity at the lowest possible cost. The Waiahi hydro plants are by far the most cost effective generation facilities KIUC owns. By utilizing hydro power from Waiahi instead of diesel, we are saving our members an estimated \$1.75 million a year. The hydros also allow KIUC to avoid burning roughly 675,000 gallons of diesel each year, which substantially reduces air emission releases.

These hydroelectric plants are an important component in KIUC's strategy of developing a diverse generation portfolio to meet the State of Hawai'i's mandate of 100 percent renewable generation by 2045. Utilizing a combination of hydro, biomass and solar generation resources, Kauai has increased its renewable portfolio from 8 percent in 2010, to more than 40 percent at the end of 2017. Each of these three technologies brings unique benefits and advantages to the overall portfolio.

Hydro is particularly impactful because it provides us power that is reliably produced 24 hours a day, versus solar which can be unreliable based on variable weather patterns. Hydro also delivers power on a much smaller footprint than solar, which requires large acreages of land to generate power equivalent to hydro. Additionally, the Waiahi hydros have been in operation for close to 100 years, and we expect their useful life to continue for at least another 65 years. In comparison, the projected life of a solar field is currently 20-25 years.

In addition to delivering these important community and environmental benefits, hydro, and specifically the Blue Hole Diversion, has contributed to a flourishing agriculture industry in Wailua for nearly a century. As previously mentioned, the hydro facilities and their associated ditch systems supported Līhu'e Plantation until its closure in 1999, and for decades the ditch systems have supported diversified agriculture in central Kaua'i. Roughly 75 farmers and ranchers currently produce a variety of products on 10,000 acres of land in the Kālepa and nearby areas, and rely on irrigation water that is supplied in part by this ditch system.

Other downstream uses on the system include a water treatment plant that provides drinking water for the Puhi-Līhu'e-Hanamā'ulu area, and utilization of the ditch system for ecotourism. Additionally, we recognize that any lease negotiated with the Department of Land and Natural Resources will provide royalties to the Department of Hawaiian Homelands, along with water rights sufficient to support current and future homesteaders in the area.

Since assuming the revocable permit for the system in 2002, KIUC has demonstrated the importance of responsible stewardship of these precious natural resources. In accordance with the terms of the permit, KIUC has provided regular maintenance for the diversions and ditch systems, and has repaired the road leading to the Blue Hole Diversion on numerous occasions following severe weather events. Access to this area is important to local residents as well. CWRM's own report points out that many residents enjoy the pools created by the stream diversions for swimming. It is also notable that, during the tenure of our permit, there has never been a verified complaint that downstream uses on North Fork Wailua have been negatively impacted by the operation of the diversion and ditch system.

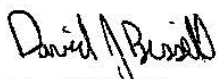
As you are probably aware, in October of 2016 vandals destroyed a portion of the Blue Hole Diversion, resulting in a configuration that has since allowed for a continual flow of water past the structure down the North Fork. While any destruction of property is troublesome, the Waiahi hydro plants continue to be productive, and previous concerns raised by some in the community about 100 percent diversion on low-flow days appear to have been resolved. Last December, the KIUC Board approved funding to complete diversion modifications that will further ensure water remains in the stream channel even during low flow periods. Some of this work has already been completed at the head and sluice gates in the ditch directly below the Blue Hole Diversion.

In the years following our application for a long-term lease in 2004, KIUC has conducted several environmental and cultural studies, and has worked closely with the staff of the Department of Land and Natural Resources and the Office of Hawaiian Affairs in this regard. In early 2018 the KIUC Board of Directors approved funding for additional environmental studies. We are in the process of completing a Chapter 343 environmental assessment to submit to the Board of Land and Natural Resources in support of the lease application.

In conclusion, allow me to state unequivocally that KIUC, as a not-for-profit organization providing a critical service to the people of Kaua'i, remains committed to being a responsible steward of the resources entrusted to us under our revocable permit. We believe that the establishment of an adequate IIFS for Wailua will insure the sustainability of the natural resource, while allowing for other historically beneficial uses to continue and contribute to a healthy and vibrant community.

We look forward to additional collaboration as CWRM moves toward the conclusion of these deliberations.

Warm regards,



David Bissell  
President and Chief Executive Officer

### 39) Kaua'i Backcountry Adventures, Kelley Carswell-Haneberg, June 20, 2018

**From:** [Kelley Carswell-Haneberg](#)  
**To:** [DLNR.CW.DLNR.CWRM](#)  
**Cc:** ["Jan TenBruggencate \(jan@islandstrategy.com\)"; "Arryl Kaneshiro"; Sean Stogner; Brian Fredock](#)  
**Subject:** Public hearing on water 2018 formal letter  
**Date:** Tuesday, June 19, 2018 3:10:46 PM  
**Attachments:** [Public hearing on water 2018 formal letter.docx](#)

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Please find attached Kauai Backcountry Adventures written testimony for the public fact finding meeting on Kaua'i re: Waikoko and North Fork Wailua Streams.

Please call me if you have any questions or need further information.

Sincerely,

[Kelley Carswell-Haneberg](#)  
Kauai Backcountry Adventures  
808 639-7383  
[kelley@kauaibackcountry.com](mailto:kelley@kauaibackcountry.com)  
[www.kauaibackcountry.com](http://www.kauaibackcountry.com)



6/21/18

Kelley Carswell-Haneberg, owner  
Kauai Backcountry Adventures  
3-4131 Kuhio Hwy  
Lihue, HI 96766  
Email: [kelly@kauaibackcountry.com](mailto:kelly@kauaibackcountry.com)  
Phone: 808-639-7383

Commission on Water Resource Management  
State Department of Land and Natural Resources  
P.O. Box 621  
Honolulu, Hawaii 96809.

Re: Public Fact Gathering re: Wailua water

To whom it may concern:

Kaua'i Backcountry Adventures (KBA) has been in business 15 years, employs more than 100 Kaua'i residents and actively helps maintain the former Lihue Plantation irrigation system. We have taken tens of thousands of visitors and local folks on tube tours that highlight our agricultural history.

Our patrons wear safety gear and float in tubes down a portion of the ditch system, encountering the native forest and viewing the tool marks left by the workers who cut the ditch and its tunnels nearly 100 years ago.

Regulations that will severely restrict the flow in the historic ditch system will damage our business and harm our community. Here are some of the ways we support this community.

1) Economic value:

- a. It is essential to keep a thriving business in the community. We estimate that almost all of our revenue is put back into the local community.
- b. Provide income to not only the company, but the local economy. By doing so, we provide jobs for up to 100+ employees depending on time of year/season.
- c. Provide GET for State of Hawaii and Kauai
- d. Because we are able to operate, the economic impact is widespread. Not only do we provide jobs, but we provide business to many other vendors in the community such as car dealerships, independent maintenance consultants, food and beverages, machine rental and repairs, and sign making.
- e. Enhance tourism industry income: We hear many comments from guests that the sole reason they came to Kaua'i to vacation was because they wanted to do the tubing. That brings funds to Kaua'i businesses, not only KBA.
- f. Provide landlord with business rent which in turn allows them to provide more community housing, projects and support of our community which then provides economic opportunities for other community members, as well as, improving current systems and utilities such as hydroelectric and water plants.
- g. KBA provides seasonal (such as Christmas and summer) hiring of returning local college kids which provides a way that our young adults can come and stay home during those holidays.

2) Community benefits

- a. KBA provides opportunities for our entry level employees to develop and grow into management positions which in the long run will provide better leadership of the young in our community and our island.

- b. Through our success, we are able to provide opportunities to give back to our community. For example, recently we had a food drive in partnership with another local business (SUDS) and raised approximately \$6,000 in food and cash for the Food Bank and in particular, recent flood victims.
  - c. KBA is very active in providing complimentary gift certificates to local companies, schools, rotary and non-profits to support the fundraising efforts, such as a silent auction.
  - d. KBA also supports and works closely with the Boy Scouts, Make a Wish Foundation, Wounded Warriors Project and local schools and sports teams by providing complimentary tours and/or assisting in providing uniforms to sports teams.
- 3) Maintenance and tunnel stabilization
- a. KBA assists in maintaining the roadways, clearing the many albezia trees as well as the pristine beauty of the land. By doing so, we help provide access for ranchers and to the hydroelectric plants which provide clean energy for our island.
  - b. We also maintain the Hanamaulu Ditch system which feeds Tanaka Pond Reservoir which ultimately provides water for our business and local communities.
  - c. Each year and as needed, KBA does tunnel stabilization work to preserve the tunnel and ditch structure. Again, that assists in providing water ultimately to the Lihue area.
- 4) Other miscellaneous benefits
- a. KBA is able to show visitors a part of the island that they couldn't see or appreciate otherwise. We work very hard to respect the land and provide guests with the experience of the history, culture and landscape of Kauai.
  - b. Educate guests
  - c. The services that KBA provides is complementary with ranchers, land lord (GF), water plant, and hydroelectric plants.
  - d. KBA assists in advertising the island beauty via social media.

As you can see above, Kaua'i Backcountry Adventures has a significant impact on the economy of Kaua'i. In addition, there are many other positive impacts that we share with our community and guests. Any alteration of water flow from Blue Hole negatively impacts us as we have to cancel tours.

Thank you for the opportunity to share the many ways that we support our local economy and community. Please feel free to call or email me if you have any questions.

Mahalo,

Kelley Carswell-Haneberg, owner

40) Bonnie P. Bator, June 21, 2018

Bonnie P. Bator & 'Ohana

21 June 2018

Commission on Water Resource Management (CWRM)  
DLNR Main Office – Kalanimoku Building – 1151 Punchbowl St – Rm 227 – Honolulu, Hawai'i 96813

Dear staff of the Commission on Water Resource Management: (CWRM)

Aloha ! We appreciate this opportunity to give testimony to the *Instream Flow Standard Assessment Report*. We urge CWRM to make wise decisions in the interim instream flow standards for the surface water hydrologic unit of Wailua (2040) - Waikoko & the North Fork of Wailua Rivers on Kaua'i.

Mahalo CWRM for the approval of restoring continuous water flow in Waimea River. Similarly, we appreciate That Instream values for the four West Maui streams are now protected; MAHALO to CWRM.

On that note, we urge CWRM to protect and preserve the splendor, and the customary, traditional, cultural, uses of Waikoko and the North Fork of Wailua River(s). Wailua Watershed protection, Water Sustainability and Water Security are extremely important for Kaua'i's future.

Comprehensive water resource protection are especially needed with the onset of Climate Change, Kaua'i has lost plenty North Tradewinds: Please see the following study by two scientists

“Decrease documented in frequency of Hawai'i's northeast tradewinds”

University of Hawai'i at Mānoa – Marcie Grabowski (School of Ocean and Earth Science and Technology)  
Pao-Shin Chu, Professor, Meteorology presented on 19 October 2012:

“ ... Analyzing 37 years of wind speed and direction, and sea level pressure data from land-based weather stations, buoys and reanalysis data, were Jessica Garza, a Meteorology Graduate Assistant at the School of Ocean and Earth Science and Technology (SOEST) at UH Manoa; Pao-Shin Chu, Meteorology Professor and Head of the Hawai'i State Climate Office; and Chase Norton and Thomas Schroeder.

Scientists at UH Manoa have observed a decrease in the frequency of northeast tradewinds and an increase in eastern tradewinds over the past nearly four decades, according to a recent study published in the *Journal of Geophysical Research*. Trades are the primary source of moisture for rain, and that a dramatic reduction could fundamentally change Hawaii's overall climate. “We have seen more frequent drought in the Hawaiian Islands over the last 30 years,” he noted. “Precipitation associated with the moisture-laden northeasterly trades along the windward slopes of the islands contributes much of the overall rainfall in Hawai'i.”

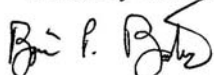
According to the National Drought Mitigation Center's State Drought Monitor, nearly 50% of land in Hawaii has experienced some degree of drought during the past year. While previous research has focused primarily on changes in tradewind intensities, this work, along with Chu's 2010 study, is among the first to show changes in tradewind frequencies.”

(<https://manoa.hawaii.edu/news/article.php?aId=5358>)

Water resources are of great importance, please CWRM: establish policies which ensure the long-term protection and sustainability of Kaua'i's precious and limited ground and surface water resources.

The Water Commission's general mission is to protect and enhance the water resources of the State of Hawaii through wise and responsible management, We definitely appreciate this! !

Sincerely with ALOHA,



Bonnie P. Bator & 'Ohana (Keana'aina, Kaiaokamalie, Keli'ikoa, and Kai)

TO: CWRM Ayron Strauch, Rebecca Alakai  
Please read HRS 171-58 —

- ① Wai'ale'ale Stream and Waikoko Stream uses are consumptive; their waters are not returned to the stream of origin, the N. Fork Wailua. Therefore, <sup>for 65-year lease</sup> KIUC's RP7340 application needs to meet highest level of scrutiny for water use... an EIS (not yet begun); 2 public meetings (not yet planned and scheduled), a Conservation District Use Permit (not yet begun). KIUC's Revocable Permit has been held over 16 long years while dry-stream has resulted, traditional Hawaiian cultural practices could not take place, and if they could, only under adverse conditions, an experience greatly diminished (SHOW PICTURES HERE).

- ② What is the condition of the Federally-protected Newcombe Snail, pupu wailani?

- ③ After you <sup>Ayron</sup> testified at the BLNR meeting in Honolulu Dec 8, 2017, Dave Bissel, CEO of KIUC testified there is always water in Wai'ale'ale Stream. At

TRADITIONAL  
CUSTOMARY  
PRACTICES

(2)

Subsequent KIUC meetings, after my testimony, he and Jan Tenbruggencate came and told me there is always water in the Wailua stream. Please publish your findings.

Respectfully,

Sharon Goodwin

Home 808 - [REDACTED]

Cell 808 - [REDACTED]







#### 42) Ned Leone, June 24, 2018

**From:** [Ned Leone](#)  
**To:** [DLNR.CW.DLNR.CWRM](#)  
**Cc:** [Strauch, Ayron M](#); [DaMate, Leimana K](#)  
**Subject:** (IFSAR) Kauai 6/24/2018  
**Date:** Sunday, June 24, 2018 5:58:40 PM

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June 24, 2018

Thanks for the opportunity to put in my two cents regarding the Wailua, Waikoko and North Fork Streams (Kauai).

Having attended the public, fact-gathering meeting, it appeared to me that 98% of the people that gave comment in favor of the continued abuse and mismanagement of our most precious resource (Water), either worked for or represented KIUC, Grove Farm or tour companies that have vested (\$) interest. The water in our streams are held in Public Trust for the people! It is very important to reinstate a natural flow so that we will have a healthy ecosystem to pass on to the children of today and the future. The Water Code was created 40 years ago with the intent to set instream flow standards to keep our streams healthy and it has been far too long that CWRM has neglected it's responsibilities to protect and manage our streams. CWRM has allowed a few corporations to have total control and to divert and destroy all of our major rivers and streams while hiding behind a stupid term (status-quo). It is time for CWRM to live up to its motto; "Kahuwai Pono" and do the Pono thing for the health and well-being of all of our streams throughout the Hawaiian Islands. What is happening in west Maui is encouraging & a step in the right direction.

Ned Leone,  
A concerned citiZen

43) Kaua'i Economic Development Board, Nancy A. Kanna, June 29, 2018



June 26, 2018

Ms. Suzanne D. Case, Chairperson  
Commission on Water Resources Management  
Kalanimoku Building  
1151 Punchbowl St., Room 227  
Honolulu, HI 96813

RECEIVED  
COMMISSION ON WATER  
RESOURCE MANAGEMENT  
2018 JUN 29 AM 10:07

Re: Instream Flow Standard Assessment Report & Interim Inflow Stream Standards for the  
Hydrologic Unit of Wailua

Dear Chair Case and Commission Members,

My name is Nancy Kanna and I am the Interim Executive Director of the Kauai Economic Development Board (KEDB) writing you regarding the Instream Flow Standard Assessment Report and Interim Inflow Stream Standards (IIFS) for the Hydrologic Unit of Wailua. KEDB supports the establishment of an adequate IIFS to allow numerous beneficial uses to continue.

KEDB is a member-based non-profit organization dedicated to improving the quality of life on Kauai by developing partnerships to diversify the economy, supporting industry clusters and educating Kauai's youth and workforce to succeed in the global economy.

The Waiahi hydroelectric plants have historically utilized water from the Blue Hole Diversion of the Wailua River for over a century. Continued adequate IIFS provides numerous benefits that help maintain the stability of Kauai's economy:

- Clean, very low cost and reliable around-the-clock energy for all members. The hydro facility helps to keep electric bills more affordable for KIUC members.
- Avoids the burning of 675,000 gallons of diesel each year, substantially reducing air emission releases and helps moves the State of Hawaii closer to its mandate of 100 percent renewable generation by 2045.
- Downstream flow allows for an agricultural community to flourish (roughly 75 ranchers and farmers) that relies on irrigation water supplied in part by this ditch system.
- Other downstream uses include a water treatment plant that provides water for the Lihue-Puhi-Hanamaulu areas and an eco-tourism business that relies on the ditch system.



Kauai Island Utility Cooperative has a proven track record of care and stewardship of the hydro-electric plant and its surrounding environment. KIUC has conducted environmental and cultural studies of the area and will soon have an environmental assessment completed for submission to the Board of Land and Natural Resources in support of their lease application.

We understand the environmental concerns and simply ask the Commission to strike a balance that maintains adequate IIFS for Wailua River while insuring the sustainability of the natural resource and allowing other historical beneficial uses to continue. Doing so allows for continued economic stability on the Island of Kauai.

Sincerely yours,

Nancy A. Kanna  
Interim Executive Director  
Kauai Economic Development Board

**44) Alberto Genovia, July 9, 2018**

**From:** [Alberto Genovia](#)  
**To:** [DLNR.CW.DLNRCWRM](#)  
**Subject:** sharing the need for written comment on the interim in-stream flow standard for Wai`ale`ale and Waikoko streams,  
**Date:** Monday, July 09, 2018 7:47:56 AM

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Aloha to the Commission on Water Resource Management State Department of Land and Natural Resources,

Please see it from the eyes of the people whose families have been here for over 10 generations and to believe that when businesses try to produce a product like they have been for past 100 years and that they have not considered the environmental quality of this business and how it effects these little islands of hawaii. Just geographically knowing that amount of Land mass to population ratio we have exciting any chance of proper restoration and having a a stable natural environment known as Hawaiian islands . Enough with the desecration of Mother Nature's only loving place of peace and give our world a chance to restore the energy for the future generations to come and share! 100 % inflow stream is needed to properly be active in ahupuaa restoration.

45) Contractors Association of Kaua'i, July 10, 2018

**CONTRACTORS ASSOCIATION OF KAUAI**

4231 Ahukini Road • Lihu'e, Kaua'i, Hawai'i 96766  
Phone: (808) 246-2662 • Fax: (808) 246-8642



RECEIVED  
COMMISSION ON WATER  
RESOURCE MANAGEMENT  
JUL 10 PM 12:23  
2018

**Testimony of Support from the Contractors Association of Kaua'i (CAK)**

**Relating to:**

**Instream Flow Standard Assessment Report for the Hydrologic Unit  
of Wailua (2040)-Waikoko and North Fork Wailua Streams - - Kaua'i**

The Contractors Association of Kaua'i (CAK) is a 60-year-old trade association representing over 100 member companies who employ approximately 1,000 people. The commission's decision will impact our member companies professionally and it will also impact their staff and employees and their families.

The CAK Board of Directors supports the instream flow for Kaua'i Island Utility Cooperative's hydro power system, the more commonly known North Wailua or Upper Hydro that has been operational for over 80 years. The system has withstood flooding, flash flooding, hurricanes, high wind events and even vandalism. It is one of the best, if not the best, and most dependable renewable energy system for us rate payers.

As a state that is pushing renewable energy at every opportunity, it would be a travesty for the Commission on Water Resource Management to not support this. For many lay-people, we see hydro as a "pass through" renewable system and all things - live or *opala* - eventually makes its way down the Wailua River and out to sea. How many live creatures of fresh water origin will survive this journey and the salt water elements of the Pacific Ocean?

Kaua'i has been very fortunate to have had agricultural forefathers with the foresight, some over a hundred plus years ago, to begin the development of hydro power, systems that have outlived the industry and continues to be a generally environmentally friendly and dependable system.

The Contractors Association of Kaua'i strongly supports the application before you from the Kaua'i Island Utility Cooperative and we want to encourage the Commission to support Kaua'i's renewable energy programs by approving this use of a natural resource that benefits the entire community - even those who oppose this project.

Thank you for allowing us the opportunity to provide comments.

**46) Sharon Goodwin, July 10, 2018**

**From:** [Sharon Goodwin](#)  
**To:** [DLNR.CW.DLNR.CWRM](#)  
**Subject:** IIFS Assessment on Wai`ale`ale Stream and Waikoko Stream  
**Date:** Tuesday, July 10, 2018 1:02:45 PM

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Aloha CWRM -- Ayron Strauch, Charley Ice, Rebecca Alakai and many others,

As a Kaua`i resident, and Hawaii National, I hail your 6-20-18 E Maui Streams Decision and Order. What is needed for Wai`ale`ale and Waikoko Streams, and many other streams on Kaua`i Island for that matter, is for CWRM to apply a similar template in resolving our diversions.

My husband, Michael (Kip) Goodwin shared my testimony at the CWRM meeting, Kaua`i 6-20-18.

At the time I was not aware of the Water Commission's four broad categories of Streams--kalo and community streams, habitat streams, public use streams and other streams.

I deeply believe Wai`ale`ale Stream and Waikoko Streams are outstanding streams in the first 3 categories and should NOT be diverted.

Hawaiians refer to the area of the Wai`ale`ale and Waikoko Streams as wau akua, the realm of god. As a hula dancer and student of Hawaiian culture all my life, I believe this.

Please hold yourselves to the highest standard in protecting Public Trust waters as you decide who these waters will serve. Ola I Ka Wai. Water is Life.

Mahalo,  
Sharon Goodwin  
Member, Kia`i Wai O Wai`ale`ale

#### 47) Earthjustice, V. Lu'ukia Nakanelua, July 11, 2018

**From:** [Lu'ukia Nakanelua](#)  
**To:** [DLNR, CW, DLNR, CWRM](#)  
**Cc:** [Isaac Moriwake](#); [Leinaala Lev](#)  
**Subject:** Testimony on the IFSAR for Wailua (2040) - Waikoko and Wai'ale'ale (North Fork Wailua) Streams  
**Date:** Wednesday, July 11, 2018 10:44:27 AM  
**Attachments:** [2018-7-11 Earthjustice Comments on IFSAR.pdf](#)

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Aloha mai,

Attached for your review is our comments on the IFSAR for Wailua (2040), specifically for Waikoko and Wai'ale'ale Streams.

Please contact us should you have any questions.

Mahalo,

Lu'ukia

V. Lu'ukia Nakanelua  
2018 Summer Law Clerk  
Earthjustice  
850 Richards St., 4th Flr.  
Honolulu, HI 96813  
T: 808.599.2436  
F: 808.521.6841  
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[facebook.com/earthjustice](https://facebook.com/earthjustice)  
[twitter.com/earthjustice](https://twitter.com/earthjustice)



*Because the earth needs a good lawyer*

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July 11, 2018

Via Electronic Mail

Commission on Water Resource Management  
Kalanimoku Building  
1151 Punchbowl Street, Room 227  
Honolulu, Hawai'i 96813  
dlnr.cwrmm@hawaii.gov

Re: Earthjustice Comments on the Draft Instream Flow Standard Assessment Report for Wailua, Kaua'i.

Dear Commissioners and Commission Staff:

Earthjustice submits these comments on the "June 2018" draft of the Instream Flow Standard Assessment Report ("IFSAR"), Island of Kaua'i, Hydrologic Unit 2040, Wailua. At this time, these comments focus on certain portions of the report relating to the establishment of instream flow standards for Wai'ale'ale and Waikoko Streams.

The Cultural and Spiritual Importance of This Area Must Be Fully Respected.

While the IFSAR compiles helpful information on the cultural significance of mauka-makai flow generally and the Wailua region more specifically, *see id.* § 12.0, the Wai'ale'ale area encompassing Wai'ale'ale and Waikoko Streams warrants further, special emphasis. The acknowledgment that "Wai[']ale[']ale is a hugely important place to Native Hawaiians," *id.* at 66, in fact, may not fully capture and convey the ultimate cultural and spiritual importance of this area and, conversely, the grave hewa (wrong) caused by diverting its life-giving wai.

Waikoko translates to "blood water." The name metaphorically references this stream's vital role in "bringing life to the land—like the fluid that circulates in the principal vascular system of human beings and other vertebrates."<sup>1</sup> Wai'ale'ale, literally meaning "rippling or artesian water," refers to the "[r]ipples on the surface of the summit's lake caused by ever-

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<sup>1</sup> K. KEKUA AND A. ALAPA'I, A CULTURAL STUDY: NATIVE HAWAIIAN TRADITIONS, CUSTOMARY PRACTICES AND PERSPECTIVES OF THE NATURAL AND CULTURAL RESOURCES OF PUNA, KAUA'I ISLAND 58 (April 2010) ("Kekua & Alapa'i").

present winds." Kekua & Alapa'i at 10. The lake contains pure water associated with Kāne, the principal divinity of freshwater, for healing and other ceremonial practices.<sup>2</sup>

For generations, Kānaka Maoli have physically and spiritually relied on the Wai'ale'ale area for its life-giving water and revered its sacredness for not only the surrounding communities and island, but the entire lāhui Hawai'i. Kūpuna acknowledged and respected the area as the piko, or navel, of Kaua'i and continue to pass on that knowledge to the next generations. See Kekua & Alapa'i at 57. The term piko has a dual meaning that refers to a blood relation or the reproductive organs, and also a summit or the center of a mountain. "Just as a pregnant mother provides a life line of nourishment and energy through the piko or umbilical cord to her unborn child in the womb, Wai'ale'ale and its crater of waterfalls and streams sustain the island and its communities with life-giving waters." *Id.* These meanings underscore the sacred significance of Wai'ale'ale, characterizing its deep connection to Kānaka Maoli and the life and health of our island communities, for present and future generations.

As the historical and archaeological record shows, Kānaka Maoli developed an extensive 'aha moku system of land and water stewardship in the Wailua watershed. The ahupua'a of Wailua, from Wai'ale'ale at its apex to the ocean, includes a host of major heiau (temples), wahi pana (storied and celebrated places), historic burial grounds, and natural resource areas across the entire mauka-makai landscape. See IFSAR at 66. Throughout Wailua, each sacred site was purposefully designed to correspond with the perpetual cycles of physical and spiritual life. See Kekua & Alapa'i at 10. For example, in ancient times, the Ali'i Nui (high chief) of Kaua'i traveled on annual pilgrimages with members of his or her court to the Ka'awako heiau located at Wai'ale'ale's summit, Kawaikini. The royal court also periodically traveled from the lands near the ocean to Kawaikini, to pay homage to the cyclical movements of the atmosphere, the earth, and the network of waterways that bring forth ka wai ola a Kāne, the sacred, life-giving waters of Kāne. The water that flows from the Wai'ale'ale area is the lifeblood of this mauka-makai cultural landscape and is "critical to the master plan of the ancients who established Wailuanuiaho'āno (historic name of the Wailua watershed) as a major religious center for Kaua'i and Hawai'i [nei]." *Id.*

In the hula tradition, the classic 'oli komo or admission chant<sup>3</sup> of Kūnihi ka Mauna, which recounts a part of the Pele and Hi'iaka saga,<sup>4</sup> names the Wai'ale'ale area and numerous

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<sup>2</sup> See Comm'n on Water Res. Mgm't, Decls. of Water Use, vol. I, at 181 (Sept. 1992) (documenting this cultural water use of Wai'ale'ale water).

<sup>3</sup> Under the Kānaka Maoli custom of 'oli komo, chanters ask permission to enter a place of reverence, including, in the hula tradition, a classroom or performance stage.

<sup>4</sup> In her journey to Kaua'i to fetch prince Lohiau for her older sister Pele, Hi'iaka confronted Wailua, a mo'o (dragon/priestess) who was obstructing passage over the Wailua River. Hi'iaka called out, in the form of this chant, demanding safe passage. When Wailua

other celebrated places from mauka-makai along the Wailua River. Like other chants and songs composed for this area, the imagery of these places describes fresh water's foundational role as a physical and ethereal life force in this area and throughout Hawai'i nei. The word "wai" is repeated in Wai'ale'ale (rippling water), Wailua (two waters), Kawaikini (the numerous waters), and 'auwai (taro irrigation canal). Kaipuha'a (the low gourd), is the name of the famous basin at the base of the mountain that creates the shape of Kāne's ipu, the water gourd providing everlasting life. See Kekua and Alapa'i at 84.

Kūnihi ka mauna i ka la'i ē,	Steep stands the mountain in the calm
'O Wai'ale'ale lā i Wailua,	Wai'ale'ale there at Wailua
Huki a'e la i ka lani	Tossed into the heavens
Ka papa 'auwai o Kawaikini;	Was the bridge of Kawaikini
Ālai 'ia a'ela e Nou-nou,	Obstructed by Nounou
Nalo Kaipuha'a,	Kaipuha'a Hill is hidden
Ka laulā mauka o Kapa'a, ē!	Into the broad plains above Kapa'a!
Mai pa'a i ka leo!	If the voice is withheld, no greeting will come!
He 'ole kāhea mai, ē!	The voice calls!

NATHANIEL B. EMERSON, UNWRITTEN LITERATURE OF HAWAII 40 (1909).

Centuries after Hi'iaka first chanted "Kūnihi," the chant is still treasured among Kānaka Maoli. It is commonly the first 'oli komo an 'olapa (dancer) learns at hālau hula, not only in Hawai'i but around the world. It is also widely recited by other cultural practitioners and haumāna seeking permission to enter a heiau, a forest, or any other sacred place. When chanting an 'oli, especially in recalling the imagery of a specific sacred place, one is invoking the maoli or life force of that place. Diverting the wai from the streams literally drains the life from this chant and other oral traditions of this sacred area.

In addition to the inherent sacredness of this area in itself, the Commission should recognize that Wai'ale'ale and Waikoko Streams and the Wailua watershed in general support active Native Hawaiian traditional and cultural practices, although these are being significantly impaired by the diversion streamflows. Based on our ongoing community consultations, these practices include hi'uwai (purification ceremony that requires full immersion of the body); gathering of Native stream life; gathering of Native plants for hula and medicinal uses; and lo'i kalo (wetland taro fields) cultivation.

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refused, Hi'iaka reduced her to reptilian form and threw large rocks across the river to allow passage, which may be seen today. See J.N. Kapihenui, *Mo'i Jolelo no Hi'i'iaikaikapoliopole*, KA HOKU O KA PAKIPIKA, Dec 26, 1861–July 17, 1862.

The DAR Atlas indicates the general presence of native stream species in the Wailua watershed.<sup>5</sup> Long-time kama'āina further attest to the historical abundance of native stream life above the diversions, especially 'ōpae, but also 'o'opu. They also report that these resources have markedly diminished over the years, such that the streams do not support traditional and customary Native Hawaiian ("T&C") gathering practices as before. Kama'āina have observed the negative impacts of streamflow diversions, which increased in the early 1990s when the plantation rebuilt and expanded the Blue Hole intake on Wai'ale'ale Stream from a partial to total diversion.

The IFSAR generally mentions plants gathered for cultural purposes along and between streams in the upper reaches of the Wailua watershed. *See id.* at 66. Kama'āina, in fact, have gathered a wealth of native plants for medicinal use and hula practices specifically on and along the Waikoko and Wai'ale'ale streams. For example, 'iwa'iwa (maiden hair fern), used to heal respiratory problems, were observed growing on the damp walls of Waikoko and Wai'ale'ale Streams at higher and consistent streamflow. Kama'āina further note that other plants gathered in this area such as maile and palapalai for hula adornments, hō'io or pohole (fern shoots), and mamaki (leaves used for health and healing), thrive with consistent streamflows. More recently, however, traditional gatherers have observed that these and other plants gathered for cultural purposes have become scarcer and harder to find with the persistent diversions of streamflows.

As the IFSAR notes, prior to the introduction of sugarcane, lo'i kalo (wetland taro fields) flourished downstream of the Wai'ale'ale area and throughout the entire Wailua watershed. *See id.* at 66. Today, cultural practitioners are restoring lo'i kalo downstream of the Wai'ale'ale area, as well other crops such as 'awa, mai'a, and kī, and there is community interest to expand such cultivation.

In sum, the IFSAR and the instream flow standards for Wai'ale'ale and Waikoko Streams must fully recognize and reflect the sacredness of the streamflows in this area and the important cultural practices and beliefs that depend on these flows.

#### Streamflow Restoration Would Enhance Endangered and Rare Native Species Habitat.

In enacting the state's endangered species laws, the legislature found: "To insure the continued perpetuation of indigenous aquatic life, wildlife, and land plants, and their habitats for human enjoyment, for scientific purposes, and as members of ecosystems, *it is necessary that the State take positive actions to enhance their prospects for survival.*" Haw. Rev. Stat. ("HRS") § 195D-1 (emphasis added). The legislature mandated that all state agencies "use their authority in furtherance of the purposes of this chapter by: (1) Carrying out programs for the protection

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<sup>5</sup> See JAMES E. PARHAM ET AL., ATLAS OF HAWAIIAN WATERSHEDS & THEIR AQUATIC RESOURCES 337-40 (2008).

of threatened and endangered species; and (2) Taking such action as may be necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened or endangered species." *Id.* § 195D-5(b). This state law mandate is independent of, and additional to, federal endangered species law.

The Commission thus has an independent legal duty in setting instream flow requirements to protect and enhance endangered species and their habitat. The United States Fish and Wildlife Service ("USFWS") designated the area above the Wai'ale'ale diversion intake as critical habitat for the endangered Newcomb's snail. This means the area is "essential to the conservation of a listed species" and "contain[s] the primary constituent elements (habitat components) essential for the conservation of the species." Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Newcomb's Snail, 67 Fed. Reg. No. 161 at 54026 (Aug. 20, 2002) (codified at 50 C.F.R. § 17.95(f)). The USFWS, however, excluded the area below the Wai'ale'ale diversion intake from the critical habitat designation specifically because "an ample instream flow of cool, clean water is considered to be one of the primary constituent elements for the Newcomb's snail, and the diversion structures . . . have altered the hydrologic regimes of the reaches below the dams to the extent that no water flows past the dams during biologically significant periods of time." *Id.* at 54047. The lack of instream flows is thus the determinative factor eliminating the area below the diversions as critical habitat for the Newcomb's snail. The Commission must restore ample instream flows below the diversions to enhance and expand the critical habitat for this endangered species.<sup>6</sup>

We understand that the area upstream of the Wai'ale'ale and Waikoko diversions also hosts abundant populations of rare Native damselflies, including several candidate endangered species. Restoring instream flows would also expand the available habitat for these species.

#### Proper Context and Perspective Are Needed Regarding These Hydropower Diversions.

The IFSAR's discussion of hydropower generation includes some basic information on the streamflow diversions for the Upper and Lower Waiahi plants (together, the "Waiahi plants") operated by Kaua'i Island Utility Cooperative ("KIUC"), but more meaningful context

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<sup>6</sup> USFWS's observation of no Newcomb's snails around the diversion on a one-day visit in no way diminishes this duty. Newcomb's snail populations are known to disappear and reappear particularly after floods, and there has been recent flooding on Kaua'i. Moreover, apart from the scientific relevance of the limited one-day observation, critical habitat includes areas "both occupied and unoccupied" that are essential to the conservation of an endangered species. *Id.*

and inquiry is required, especially for purposes of weighing offstream uses in setting instream flow standards. *See* HRS § 174C-71(2)(D).

First, it should be made clear that the Waiahi plants are not an instream use of Wai'ale'ale or Waikoko Streams under the express legal terms of the Water Code. An "instream use" is specifically for purposes that "are located *in the stream*" and "achieved by leaving water *in the stream*." HRS § 174C-3 (emphasis added). A "noninstream use" is "the use of stream water that is *diverted or removed from its stream channel* and includes the use of stream water *outside of the channel* for domestic, agricultural, and industrial purposes." *Id.* (emphasis added).

While section 13.0 of the IFSAR acknowledges that hydropower is a noninstream use, section 9.0 suggests there is some debate whether the Waiahi plants may qualify as an instream use. *See id.* at 53. The plain meaning of the Code's definitions are not subject to debate. The hydro plants do not use water *in* the streams, but rather divert water *from* the stream channels. Moreover, returning the diverted water at a different, distant point downstream, or into another stream, does not qualify the diversion as an instream use under the Code's express terms.

Second, the IFSAR should provide more transparent information and analysis on KIUC's hydropower use, beyond the public relations-type statements about KIUC and the hydro plants that the IFSAR currently incorporates. *See id.* at 82. As the IFSAR notes in passing, the Waiahi plants produce only one percent of KIUC's power needs. *See id.* Further inquiry into the reports that KIUC files with the state Public Utilities Commission indicates that KIUC does not consider the Waiahi plants essential to its available generating capacity: in its listing of facilities that comprise "KIUC's 2018 system generating capacity and total firm peak system demand," KIUC does not bother to include the Waiahi plants.<sup>7</sup>

Likewise, the IFSAR should examine the efficiencies of the Waiahi plants. About 20 million gallons of water per day ("mgd") are diverted from Wai'ale'ale and Waikoko Streams, which is a sizable amount compared to other streams across Hawai'i. *See id.* at 53. This 20 mgd accounts for "up to 50%" of the tailrace flows of the lower Waiahi plant and about 66% of the contributions to the upper Waiahi plant. *See id.* at 53.<sup>8</sup>

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<sup>7</sup> *See* KIUC, 2018 ADEQUACY OF SUPPLY STATEMENT 3 (Dec. 21, 2017), *available at* <https://puc.hawaii.gov/wp-content/uploads/2018/01/Adequacy-of-Supply-KIUC-2018.pdf>.

<sup>8</sup> The IFSAR also documents substantial waste from ditch leakage totaling 3.75 cfs (about 2 mgd), during a period when the Bluehole diversion was closed. *Id.* at 82. This compares to 13.6 mgd delivered at the end of the ditch without the Bluehole diversion, or about 13% losses. There is no data for the volume and percentage of losses when flows from the Bluehole diversion are included.

According to KIUC, the Waiahi plants produce a total of about 1.3 megawatts ("MW") of electricity (500 kilowatts ("kW") from the upper plant and 800 kW from the lower plant). *See id.* at 82.<sup>9</sup> Of this total electricity, the flow contributions of Wai'ale'ale and Waikoko Streams roughly account for about 400 kW from the lower plant (50% of 800 kW) and 333 kW from the upper plant (66% of 500 kW), or a total of 0.73 MW. This translates to about 37 kW per 1 mgd of diverted streamflow. For perspective, 37 kW is equivalent to only about *five residential rooftop solar systems* (at a typical size of around 7 to 8 kW per system).

In contrast, KIUC is proposing to develop another hydro facility in Waimea that is intended to produce 25 MW using 11 mgd.<sup>10</sup> Based on KIUC's information, the new hydro facility would be able to produce 34 times more electricity (compared to 0.73 MW) with about half of the diverted flow volume and would be around 62 *times* more efficient in terms of water use (25 MW from 11 mgd versus 0.73 MW from 20 mgd).

Further, just in the past two years, KIUC has opened two utility-scale solar-plus-battery plants of 13 MW and 28 MW, and recently obtained approval for a third 19.3 MW solar-plus-battery plant.<sup>11</sup> These plants, totaling more than 60 MW solar capacity, are able to dispatch their output and provide energy during the evening peak demand period. KIUC states that these plants will enable the utility to approach 70 percent renewable generation by the end of 2019. *Id.* The Waiahi plants amount to about 2% of the production of these solar-plus-battery plants (based on 1.3 MW, or 1% based on the 0.7 MW attributed to the Wai'ale'ale and Waikoko Streams diversions), while diverting tens of millions of gallons every day and causing incalculably greater water use impacts.

In its recent East Maui final decision, the Commission emphasized its intent to "catalyze the innovation, efficiency and investments needed to optimize and enhance new sources of water . . . . Modern agribusiness investors should not expect to build a new industry on the back of century-old infrastructure."<sup>12</sup> The same principle applies to KIUC's Waiahi plants and

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<sup>9</sup> *See also Waiahi Hydro Facilities*, KIUC, <http://kiuc.coopwebbuilder2.com/content/waiahi> (last visited July 3, 2018).

<sup>10</sup> *See* Press Release, KIUC Board Takes Actions To Proceed With Pu'u 'Ōpae Pumped Storage Hydro Project (Sept. 27, 2017), <http://kiuc.coopwebbuilder2.com/sites/kiuc/files/PDF/pr/pr2017-0927-pumpedhydro.pdf>.

<sup>11</sup> *See* Press Release, PUC Approval Helps KIUC Close In On Renewable Goals (June 22, 2018), <http://website.kiuc.coop/sites/kiuc/files/PDF/pr/pr2018-0622-PUC%20approves%20KIUC%20PMRF%20project%20REV1.pdf>.

<sup>12</sup> Comm'n on Water Res. Mgmt.'s Findings of Fact, Conclusions of Law, and Decision and Order, at vi, *Contested Case Hearing*, No. CCH-MA13-01 (June 20, 2018), *available at* <http://files.hawaii.gov/dlnr/cwr/cch/cchma1301/CCHMA1301-20180620-CWRM.pdf>.

its hydro and energy operations in general. KIUC should not expect to simply install new turbines at the end of century-old plantation ditches, nor should it be allowed to lock in legacy diversions, and all their environmental and cultural harms, for another century. Rather, in coordination with the installation of modern renewable energy facilities, KIUC should show community leadership and initiative to retire less efficient plantation-era hydro plants, or least modernize them to minimize or avoid their negative impacts.

Along these lines, we understand that KIUC held up the Waimea River agreement as a "model" for the Waiahi hydro plants. The Waimea agreement included:

- fundamental guiding principles including, "All streams will be allowed to run from the mountain to the sea and no diversion will ever be a total diversion again";
- thorough responsibilities by KIUC to modify the diversions and install real-time monitoring equipment;
- significant restoration and maintenance of continual streamflows particularly during lower flow conditions, with 2/3 of the flows remaining in the stream during lower flow periods, and a shift toward utilizing flows during higher flow periods for hydroelectric production;
- implementation of a modern hydro facility, including enclosing diverted flows in pipes to minimize waste.<sup>13</sup>

If the Waiahi plants are not committed for phase out and retirement altogether, then Earthjustice would expect that KIUC adopt and build on such best practice for the operation of these plants going forward.

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<sup>13</sup> See Mediation Agreement for the Waimea Watershed Area, April 18, 2017, at 2-3, 6-7, available at [https://dhhhl.hawaii.gov/wp-content/uploads/2017/04/20170418\\_Agreement.pdf](https://dhhhl.hawaii.gov/wp-content/uploads/2017/04/20170418_Agreement.pdf).

Mahalo nui for this opportunity to submit comments on the IFSAR. We look forward to continued engagement with the Commission on the instream flow standards process to restore streamflows and justice for "ka wai hālau o Wailua," the expansive waters of Wailua.<sup>14</sup> Please do not hesitate to contact us with any questions.

Respectfully submitted,

/s/ V. Lu'ukia Nakanelua

V. Lu'ukia Nakanelua

Leinā'ala L. Ley

Isaac H. Moriwake

EARTHJUSTICE

cc (via electronic mail):  
Kaua'i Island Utility Cooperative  
Office of Hawaiian Affairs

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<sup>14</sup> MARY KAWENA PUKUI, 'ŌLELO NO'EAU, HAWAIIAN PROVERBS & POETICAL SAYINGS 178 (1983) (boasting the vast waterways of Wailua, Kaua'i).

**48) Hope Kallai, July 11, 2018**

**From:** [Hope Kallai](#)  
**To:** [DLNR.CW.DLNRCWRM](#); [DLNR Comms](#)  
**Subject:** IFS comments for Wailua, Kauai  
**Date:** Wednesday, July 11, 2018 11:40:10 AM  
**Attachments:** [2018 July Comments to CWRM on Wailuai, Kauai IFS .pdf](#)

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Aloha e CWRM- Attached please find my comments on Wailua, Kauai IFS. Please let me know if my letter does not open correctly.

Mahalo,

Hope Kallai

2018 July 3

Hope Hamilton Kallai



Commission on Water Resource Management  
State Department of Land and Natural Resources  
P.O. Box 621  
Honolulu, Hawai'i 96809.  
FAX (808) 587-0219  
[dlnr.cwrmm@hawaii.gov](mailto:dlnr.cwrmm@hawaii.gov)

RE: DRAFT PR-2018-01  
Instream Flow Standard Assessment  
Wailua Hydrologic Unit 2040, Kauai

Aloha e Commission:

Please consider my comments on the Instream Flow Standard Assessment on Wailua, Kauai streams, specifically Wai`ale`ale (also known as West Branch of the North Fork of Wailua River {WB NF Wailua}) and Waikoko Streams.

I support the Commission's recent decision in regard to the streams of Maui and request that the Commission consider the streams of Wailua, Kauai through the same priority and management filter of Stream Classification used in this contested case process, as published in the News Release of June 20, 2018.<sup>1</sup>

In this decision, the Commission classifies streams in four broad categories that represent different priorities and management strategies: **Kalo** (taro) **and Community Streams**, **Habitat Streams**, **Public Use Streams**, and **Other Streams**.

Wailua ahupua`a had significant lo`i kalo along the Wailua river system. Wai`ale`ale and Waikoko are **Kalo and Community Streams**, that should not be diverted. The baseflow of Wai`ale`ale and Waikoko Streams have been 100% diverted by the Kauai Island Utility Cooperative "Blue Hole" dam and diversion system, offsite, to the Waiahi Hydropower Plants to produce 1% of Kauai's energy needs. These Kalo Streams should not be diverted. The Air Corps documented wet pond agriculture remaining in Wailua on March 15, 1929.

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<sup>1</sup> 2018 June 20. DLNR News Release: DECISION ON EAST MAUI INTERIM INSTREAM FLOW STANDARDS RELEASED. <https://dlnr.hawaii.gov/blog/2018/06/20/nr18-116/>. 1 page



### **Kalo and Community Streams<sup>2</sup>**

Hawai'i's Water Code recognizes kalo and other traditional agriculture as an instream use. The Commission's decision will return free flowing water, with no upstream diversions, to all streams which have historically supported significant kalo cultivation.

The Commission's intent is to modify, and remove if necessary, all diversions in each kalo stream and their tributaries to allow unrestricted total flow into the stream. The Commission set the interim instream flow standard at a location below the kalo lo'i. These instream flow standards serve as guidelines to monitor native habitat restoration. It is not the Commission's intent to regulate, at this time,

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<sup>2</sup> 2018 June 20. Findings of Fact, Conclusions of Law & Decision and Order, Petition to Amend Interim Instream Flow Standards for Honopou, Hanehoi/Puolua (Huelo), Waikamoi, Alo, Wahinepee, Puohokamoa, Haipuaena, Punalau/Kolea, Honomanu, Nuaailua, Piinaau, Palauhuulu, Ohia (Waiānu), Waiokamilo, Kualani (Hamau), Wailuanui, Waikani, West Wailuaiki, East Wailuaiki, Kopiliula, Puaakaa, Waiohue, Paakea, Waiaaka, Kapaula, Hanawi, and Makapipi Streams. Page 20 of 296

where and how much water will be used for traditional kalo agriculture or how the water will be apportioned amongst the various fields and farmers.

Our decision provides an opportunity to refine our knowledge of kalo water requirements and the relationship between traditional uses and habitat viability. It also provides time and flexibility for the leadership within the affected areas to develop community-based allocation and management processes for the appropriate use of water from the kalo streams. At a later date, the Commission is willing to consider permanent instream flow standards for these streams.

Our decision recognizes the importance of water from streams for traditional agriculture. Inherent in that right is the responsibility to sustain the native fauna that live in that stream, as well as to provide for other traditional and cultural gathering activities. While this approach is not intended to automatically set precedents for other areas, it does provide a new model of water use that integrates traditional culture with modern natural resource management.

I also support the Commission's decision in regard to restoration of water flow to **Habitat Streams**, modifying all diversions in habitat streams to ensure mauka-to-makai streamflow.

**Habitat Streams**<sup>3</sup> - Hawaii's streams are home to a unique variety of native fish, shrimp, mollusks and insects, most found nowhere else in the world. Their origin and link to the ocean are evident in their mainly diadromous life cycle, which means "two runs," one to the ocean as newly hatched larvae and subsequent return from the ocean to freshwater as juveniles. This completes their life cycle and underscores the importance of maintaining the "mauka to makai" connection. There is universal agreement that more water and better connectivity in streams is a good thing for native habitat restoration.

The Commission's intent is to have all diversions within these habitat streams modified to ensure connectivity to allow unrestricted movement of native species. The Commission set the interim instream flow standard in all habitat streams at 64% of the median base flow (H90).

On Maui, the Commission suggested 2 **Habitat Streams** remain undiverted as habitat reference streams. In Wailua, Kauai, I support Wai`ale`ale and Waikomo Streams be undiverted (diversions removed) as Habitat Reference

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<sup>3</sup> Ibid. Page 20 of 296.

Streams as they are home to a resident, unique species, Pupu Wailani, Newcomb's snail (*Erinna newcombi*)<sup>4</sup>.

The two exceptions are *Waiohue* and *West Wailuaiki* streams which are to remain un-diverted (*total flow* included) as habitat reference streams. We have much to learn about stream restoration and the conditions needed for recruitment of native fauna into streams that have been diverted for over one hundred years.<sup>5</sup>

On Page 44 of the 2018 June 20. Findings of Fact, Conclusions of Law & Decision and Order, Petition to Amend Interim Instream Flow Standards, the Department of Aquatic Resources commented<sup>6</sup>:

DAR supports the following positions:

The removal of stream diversions and the complete restoration of stream flow would be the best possible condition for native aquatic animals. DAR understands that management of the resource is a balance between the needs of the animals and the needs of people thus supports some use of water from East Maui Streams.

The prioritization of the East Maui Streams is based upon the "biggest bang for the buck" concept, where priority is placed on streams with the greatest potential to increase suitable habitat for native species.

The restoration of suitable flows to a single stream is more appropriate than the return of inadequate flow to multiple streams. DAR supports the trade-offs on the restoration of a smaller number of streams with sufficient water over the return of insufficient water (for example at H50 or H70 levels) to a larger number of streams.

(Exh. E-72), p. 3.

Wai'ale'ale and Waikomo Streams are designated as Critical Habitat for the extremely range-restricted Pupu Wailani, Newcomb's Snail (*Erinna newcombi*)<sup>7</sup>.

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<sup>4</sup> Newcomb's snail (*Erinna newcombi*), ECOS Environmental Conservation Online System . <https://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=G0C0>

<sup>5</sup>2018 June 20 Findings. Op Cit. Page 21 of 296.

<sup>6</sup> Ibid. Page 44 of 296.

<sup>7</sup> 2002 Part II Department of the Interior, U.S. Fish and Wildlife Service 50 CFR Part 17 Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Newcomb's Snail; Final Rule 54034 Federal Register/Vol. 67, No. 161/Tuesday, August 20, 2002/Rules and Regulations

Sub-Unit III(c): North Fork Wailua River: Critical habitat for Newcomb's snail is designated for all flowing waters associated with the North Fork of the Wailua River and its tributaries, including springs and seeps, and riparian habitat necessary to maintain the integrity of the watershed. The North Fork Wailua location in the proposed rule included 1.71 km (1.06 mi) of stream channel and 64 ha (158 ac). Due to new information received during the comment period indicating that some of the area we proposed did not contain the primary constituent element of perennial flow, we reduced this designation by 0.59 km (0.37 mi) of stream channel and 28 ha (68 ac). The North Fork Wailua River location designated now includes 1.12 km (0.7 mi) of stream channel and 36 ha (90 ac) and falls within the elevational contours of 335 to 427 m (1,100 to 1,400 ft). This population was discovered in 1995 and has fluctuated in size in subsequent observations (A. Asquith, in lit. 1995). This stream segment is located within the Lihue-Koloa Forest Reserve on State lands. A water diversion exists just downstream of the critical habitat boundary.

The location designated as critical habitat in the North Fork Wailua River is occupied by Newcomb's snail and is essential to the conservation of the species because this area is needed to maintain one of the six known populations of snails.

This residential aquatic snail is dependent on stream flow and maintenance of springs and seeps and is threatened by the KIUC water diversions on Wai'ale'ale and Waikoko Streams. Restoring undiverted streamflow is the best "bang for the buck" for these threatened species as there is no viable justification for dewatering their habitat.

On page 2, in their second 5 year review of Recovery Plan for Newcomb's Snail<sup>8</sup>,

the U.S. Fish and Wildlife Service considered altered hydrology of Newcomb's Snail streams as the highest new threat to the sustainability of Newcomb's snail:

- Altered hydrology (USFWS 2000, 2006; Polhemus and Asquith 1996; P. Levin, pers. comm. 2011a,b)
  - Agricultural development and stream diversion loss of habitat
  - Dewatering aquifers loss of habitat
  - Vertical wells loss of habitat
  - Channelization loss or degradation of habitat
  - Hydroelectric power loss or degradation of habitat
- Landslides and flooding loss or degradation of habitat (Jones *et al.* 1984; Polhemus 1993; USFWS 2000, 2006)
- Stochastic events – Hurricane mortality and reduced viability (Polhemus 1993)

New Management Actions: No new management Actions

<sup>8</sup> 2015 [USFWS] U.S. Fish and Wildlife Service. 2015. Endangered and threatened wildlife and plants; initiation of 5-year status reviews of 133 species in Hawaii, Oregon, Idaho, and Washington. Federal Register 80(30): 8100–8103. [https://ecos.fws.gov/docs/five\\_year\\_review/doc5237.pdf](https://ecos.fws.gov/docs/five_year_review/doc5237.pdf). 7 pages.

Page 4 of the 2015 5 Year Review, reiterates the further threats to Newcomb's snail conservation as altered hydrology and habitat degradation due to floods<sup>9</sup>.

**Table 2. Threats to Newcomb's snail and ongoing conservation efforts.**

Threat	Listing factor	Current Status	Conservation/ Management Efforts
Altered hydrology	A	Ongoing	None
Landslides and flooding loss or degradation of habitat	A	Ongoing	None

The Commission needs to protect these important and unique streams and consider Wai`ale`ale and Waikoko as **Habitat Reference Streams**, and protect the critical aquatic habitat by removing the KIUC stream diversions and dams that threaten this protected species. No diversions on **Habitat Reference Streams**.

On Page 21, the Commission furthered consideration of **Public Use Streams**<sup>10</sup>:

**Public Use Streams** - Public use streams were specifically identified for offstream uses that align with the Commission's public trust responsibilities.

Wai`ale`ale Stream and Waikomo Streams are popular destination hikes in the Lihue-Koloa Forest Reserve and receive high Public Use. Many people - cultural practitioners and tourists - hike to the crater wall of Wai`ale`ale from the KIUC diversion dam. The dam is not safe, it has large holes and exposed rebar and creates a Public Safety Hazard. Removal of the diversion and dam would facilitate safe public use and protect the downstream public from flash floods down the ditchline by keeping Wai`ale`ale water in its' proper channel, not diverted to commercial, offstream uses.

Downstream, the Wailua State Park complex has many cultural features that are water-dependent like `auwai connected to lo`i. The

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<sup>9</sup>Ibid. Page 4 of 7.

<sup>10</sup>2018 June 20. Findings of Fact, Conclusions of Law & Decision and Order, Petition to Amend Interim Instream Flow Standards.. Page 21 of 296.

Wailua complex of heiau are all in close proximity to Wailua River and honored water remaining in the ahupua`a.

Commercial offstream uses of Wailua water include the sale of 3 MGD of surface water to the County of Kauai from the Hanamaulu Ditch, processed into drinking water by Grove Farm at the Waiahi Surface Water Treatment Plant in Kapaia. As this commercial public water system has been operating for over a decade without water use permits, the Commission has not considered the impacts of this diversion, yet.

Other offstream uses of Wai`ale`ale and Waikoko waters include a commercial tubing operation in an agricultural ditch that carries about 300 tourists per day for about 3 hours each.

Both these commercial endeavors feel “entitled” to the un-permitted use of this forest reserve water, exported from Wailua to Hanamaulu.

In the June 20, 2018 Decision, the Commission also considered **Other Streams:**

**Other Streams to Support Diversified Agriculture** - Much uncertainty exists as to the timing and eventual replacement crops for the over 29,000 acres of former plantation sugar agriculture, 23,000 acres of which are designated Important Agricultural Lands (IAL). There is a lack of detail from HC&S in the record about the type of diversified agriculture that will be cultivated on this acreage and the amount of water required to support it. There is also ambiguity about alternative ground water availability for these lands.

Like on Maui, there is no detail about the amount of water diverted into the Hanamaulu Ditch by Grove Farm and what, if any, waterflow remains in the South Fork of Wailua River to the ocean at the ditch diversion. As Wailua is a gaining river, springs and inflow minimally re-water the river channel before it reaches the ocean, where it has high recreational use.

The Commission also realized the need to tighten up on the transport system losses, as they find twenty percent water loss not acceptable

We also want to catalyze the innovation, efficiency and investments needed to optimize and enhance new sources of water needed for this diversified era of Maui agriculture. In addition, although estimates of over 20 percent transmission system losses may comport with current industry standards, they do not reflect best practices, will not

serve the interests of future generations and are not acceptable. Modern agribusiness investors should not expect to build a new industry on the back of century-old infrastructure. Investment in ditch systems must be made to avoid leakage and waste, install modern ground water storage technologies, optimize use of non-potable water, and improve water capture and storage from storm events that increase *total flow* availability.<sup>11</sup>

I agree - 20% loss of water is from leaky ditches not acceptable.

The Wailua ahupua`a and ecosystem is seriously compromised by the massive out-of-the-ahupua`a diversion of the Wailua river system. Restoration of mauka-to-maka- river flow must begin now, following the precedence set by the Maui water decision.

No more diversion of **Kalo and Community Streams**, like Wai`ale`ale and Waikomo Streams.

No more diversion of important **Habitat Streams**, like Wai`ale`ale and Waikomo Streams.

No more diversion of **Public Use Streams**, like Wai`ale`ale and Waikomo Streams.

No more diversion of **Other Streams** for previous water needs. Only current, justified irrigation water diverted for current agricultural use can be considered, not perpetuation of sugar's furrow-flood amounts.

Thank you for considering use of Wailua waters through the wise filter established by the Commission in the June, 2018 decision and considering restoration of undiverted, mauka-to-makai stream flow in the North Fork Wailua River system and only justified use of irrigation water for agriculture.

Hope Kallai

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<sup>11</sup> Ibid. Page 22 of 296

**49) Alberto Genovia, July 11, 2018**

**From:** [Alberto Genovia](#)  
**To:** [DLNR.CW.DLNR.CWRM](#)  
**Subject:** 100% in stream flow  
**Date:** Wednesday, July 11, 2018 1:08:43 PM

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DLNR Land conservation, protection of the land, Polynesian settlers were the first humans to land on Hawai'i's shores, and with their arrival, they brought plants and animals that were needed to survive the long voyage and settle a new land. The settlers quickly learned how to use the forest resources of Hawai'i for food, clothing, medicine, and shelter. Although they impacted the forests, Hawaiians understood the connection between water and life. Rain always follows the forests, without the rain there is no water, and with no water there is no life.

The Forest Reserve System was created by the Territorial Government of Hawai'i through Act 44 on April 25, 1903. With Hawai'i's increase in population, expanding ranching industry, and extensive agricultural production of sugarcane and later pineapple, early territorial foresters recognized the need to protect mauka (upland) forests to provide the necessary water requirements for the lowland agriculture demands and surrounding communities. aesthetic benefits; watershed restoration; native, threatened, and endangered species habitat protection and management; cultural resources; and fire protection among many other things. Protect, create, and manage native and endangered species habitat.

Mahalonui Albert Genovia

Sent from my iPhone

## 50) Jade Moss, July 11, 2018

**From:** [J Moss](#)  
**To:** [DLNR.CW.DLNR.CWRM](#)  
**Subject:** Instream Flow Standard, clarifying my public testimony from June 21  
**Date:** Wednesday, July 11, 2018 1:48:05 PM

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Aloha kakou,

I'd like to clarify and expand upon my testimony given in person at the public hearing on June 21 at Kauai Community College.

I watched the video of my testimony and I realize that my first point could be taken in favor of either perspective.

So to make it clear, I stated:

"I believe the instream flow standard should be based on the lowest recorded water flow."

What I mean to say is the lowest amount of rainfall recorded that would allow for mauka to makai connectivity should be the minimum standard to instream flow. Whatever number that is, should ALWAYS flow instream. So 100% of that low rainfall day should NOT be diverted. That should be the MINIMUM standard.

I don't feel that corporations should exploit and profit from the rain. Period. Sure, they should be compensated for their operations and infrastructure use, but there needs to be a ceiling for how much water can be stored (we know Grove Farm stores water) and we need a profit cap of this public trust resource.

If Grove Farm has enough to STORE water, then there is enough water to acknowledge that they can finally build the Hawaiian Home Lands in Wailua. The excuse for delaying this project has been "no more water".

Let's be honest and house the Hawaiian 'ohana that have been on the waiting list for their entire lives.

Mahalo,  
Jade Moss  
Kalaheo  
808- [REDACTED]

51) Karen Taketa, July 11, 2018

RECEIVED  
COMMISSION ON WATER  
RESOURCE MANAGEMENT

2018 JUL 11 PM 2:08

July 9, 2018

Commission on Water Resource Management  
State Department of Land and Natural Resources  
P.O. Box 621  
Honolulu, HI 96809

Aloha,

I am submitting comments to your Commission in SUPPORT of the application before you from the Kaua'i Island Utility Cooperative (KIUC) relating to Instream Flow Standard Assessment Report for the Hydrologic Unit of Wailua- Waikoko and North Fork Wailua Strems on Kaua'i.

Born, raised and living on Kaua'i for over 60 years, I have had the opportunity to see first hand the effort the KIUC staff and its board of directors has put in renewable energy development and in cases like the hydro systems, the energy expended in retaining these systems. I hope this commission will be able to recognize that work, energy, and effort for the greater good of the residents and businesses on Kaua'i. That KIUC went forward with renewable strategies and active implementation that had this small cooperative leading the state speaks volumes about their commitment and leadership.

I have seen the KIUC staff and board attempt to move forward with renewable programs only to be opposed by a few noisy naysayers or people who never trust the work being done by their utility. It has been at times disheartening to see the same people oppose, oppose, oppose anything-- whether it be renewables, a metering system, or in this case a short diversion of water that has been going on for over a hundred years in some locations around Kaua'i.

Please look beyond the negatives and consider how this proposal will benefit ALL of the rate payers. I decided to write you because I know many people have similar thoughts as me, but I come from a culture that will not speak up in public, but it does not mean we are not aware of what is happening, or we do not care because we do but do not want to be intimidated or threatened. We want to support renewables, we want lower electric rates, we are concerned about our environment and most of all we are grateful for the work being done by the KIUC staff and board on rate-payers behalf.

Sincerely,

  
Karen Taketa

**52) Kaua'i Chamber of Commerce, Mark Perriello, July 12, 2018**

**From:** [Mark Perriello](#)  
**To:** [DLNR.CW.DLNR.CWRM](#)  
**Subject:** IIFS Testimony  
**Date:** Thursday, July 12, 2018 1:41:00 PM  
**Attachments:** [IIFS chamber testimony.pdf](#)

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Aloha,

Please find attached testimony from the Kauai Chamber of Commerce on the Interim Instream Flow Standard Assessment Report for the North Fork of the Wailua River.

If you have any questions, please contact me at this email address or by phone (808) 855-8066.

Mahalo.

Mark Perriello  
President & CEO  
Kauai Chamber of Commerce



July 12, 2018

Ms. Suzanne D. Case, Chairperson  
Commission on Water Resources Management  
Kalanimoku Building  
1151 Punchbowl St., Room 227  
Honolulu, Hawai'i 96813

**Re: Interim Instream Flow Standard Assessment Report for the North Fork of the Wailua River**

Dear Chair Case and distinguished members of the Commission:

The Kaua'i Chamber of Commerce supports your effort to set an Interim Instream Flow Standard (IIFS) for the North Fork of the Wailua River in order to maintain the health of the river ecosystem along with the many beneficial uses that residents, businesses, farmers and ranchers have come to rely on and expect.

First and foremost, the Kaua'i Island Utility Cooperative (KIUC) is making tremendous strides towards achieving the State of Hawaii's mandate of 100 percent renewable energy generation by 2045. The use of water for hydropower is a critical component in KIUC's formula for success. Power from the Upper and Lower Waiahi hydro plants has a small footprint and provides KIUC's lowest-cost source of fuel. It effectively curtails the use of hundreds of thousands of gallons of diesel per year, which is more expensive and has a negative impact on our environment.

Secondly, Kaua'i suffers from a true housing crisis. There is a dearth of inventory within financial reach of the vast majority of residents and rentals are virtually nonexistent. This crisis necessitates the creation of additional housing, including affordable housing. A reliable domestic water supply is required for the residents of Līhu'e and is necessary for the creation of additional housing in the area, which will help address this crisis.

Thirdly, Ecotourism also benefits from the waters diverted at Blue Hole. Backcountry Adventures provides a unique and memorable visitor industry experience for thousands of visitors every year and employs roughly 100 local residents. Experiences such as the Backcountry tubing ride are also advantageous in that they help alleviate congestion at our state and county parks.

Finally, the water diversion also allows local farmers and ranchers to continue their work. Agriculture is an important industry on Kaua'i and the state and county are making significant efforts to support this sector.

The mission of the Kaua'i Chamber of Commerce is to promote, develop and improve commerce, quality growth and economic stability in the County of Kaua'i. We represent over 450 businesses and organizations and over 800 individuals who give freely of their time and talents to advance the commercial, financial, industrial, civic and social well-being of the County of Kaua'i and the State of Hawai'i.

Thank you for considering the perspective of the Kaua'i Chamber of Commerce.

Mahalo,

A handwritten signature in blue ink, appearing to read "Mark Perriello".

Mark Perriello  
President & CEO

### 53) Eliel Starbright, July 12, 2018

**From:** [Eliel Starbright](#)  
**To:** [DLNR.CW.DLNR.CWRM](#); [DLNR Comms](#)  
**Subject:** The Wailua ahupua`a and ecosystem is seriously compromised by the massive out-of-the-ahupua`a diversion of the Wailua river system!  
**Date:** Thursday, July 12, 2018 2:04:47 PM

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The Wailua ahupua`a and ecosystem is seriously compromised by the massive out-of-the-ahupua`a diversion of the Wailua river system. Restoration of mauka-to-maka- river flow must begin now, following the precedence set by the Maui water decision. No more diversion of Kalo and Community Streams, like Wai`ale`ale and Waikomo Streams. No more diversion of important Habitat Streams, like Wai`ale`ale and Waikomo Streams. No more diversion of Public Use Streams, like Wai`ale`ale and Waikomo Streams. No more diversion of Other Streams for previous water needs. Only current, justified irrigation water diverted for current agricultural use can be considered, not perpetuation of sugar's furrow-flood amounts. Thank you for considering use of Wailua waters through the wise filter established by the Commission in the June, 2018 decision and considering restoration of undiverted, mauka-to-makai stream flow in the North Fork Wailua River system and only justified use of irrigation water for agricultu

54) W. Lord & Company, Wade Lord, July 12, 2018

**From:** [Wade Lord](#)  
**To:** [DLNR, CW, DLNR CWRM](#)  
**Subject:** Testimony  
**Date:** Thursday, July 12, 2018 2:45:46 PM  
**Attachments:** [Testimony- Instream Flow Standard Assessment Wailua.docx](#)

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Please accepted the attached testimony into record. Thank you for the opportunity to provide public input in this matter.

Mahalo,



Wade Lord

[Redacted]

[Redacted]

T [Redacted]

C [Redacted]

July 13, 2018

Ms. Suzanne D. Case, Chairperson  
Commission on Water Resources Management  
Kalanimoku Building  
1151 Punchbowl St., Room 227  
Honolulu, Hawai'i 96813

Re: Instream Flow Standard Assessment Report for the Hydrologic Unit of Wailua (2040)

Dear Chair Case and Commission members:

I am writing to voice my strong support for your effort to set an Interim Instream Flow Standard (IIFS) for North Fork Wailua, which will insure mauka to makai stream flow and enable beneficial uses of water that is diverted at the Blue Hole Diversion to continue.

As a Wailua Homesteads resident, I live directly above the North Fork of the Wailua River. I have gone into the arboretum and hiked to Blue Hole many times. This is an amazing natural area of splendor and grandeur. I am fortunate to be able to enjoy the beauty of the river and forest. I believe that this area and the water resource, can and should, be managed in a balanced way that permits all stakeholders to benefit from this special resource. Below is my rationale for supporting the management of the water resource.

#### History

Throughout time, the water resources have been utilized and diverted to provide and support recreation, a natural watershed, agricultural, electrical generation, and ranching activities. The original residents used the water primarily for agricultural and drinking purposes. Subsequently, the sugar, pineapple, and ranching companies used water for their agricultural and animal husbandry. This has been the established practice for hundreds of years. Additionally, the development of the irrigation system by the sugar industry helped to save water, maintain a healthy water table, and prevent extreme flooding via its system of reservoirs and ditches.

#### Tourism

Ecotourism also benefits from the waters diverted at Blue Hole. Backcountry Adventures. The flume ride provides a unique and memorable experience for thousands of residents and visitors every year, and employs roughly 100 local residents as well. Experiences such as the Backcountry tubing ride are also advantageous in that they help alleviate congestion at our state and county parks, and provide a unique wilderness experience unlike any other.

#### Growth

An adequate water supply is also necessary for the planned growth in the greater Lihue area. Lack of affordable housing for residents is a critical issue on Kauai. We have a current deficit of homes that numbers in the thousands and the need is projected to exceed 10,000 by 2035. If we are to make any

headway on addressing the need for more housing in the areas like Lihue that are slated for future growth, we must insure that domestic water will be available.

#### Utility

The use of water for hydropower is vitally important for our electric cooperative to continue its mission to meet the State of Hawaii mandate of 100 percent renewable generation by the year 2045. Power from the Upper and Lower Waiahi hydro plants is a proven, clean technology, is low-cost, highly efficient, provides avoidance of hundreds of thousands of gallons of diesel every year, and utilizes a very small footprint in doing so.

I am a former member of the Kauai Planning Commission and was intimately involved in the update of our community general plan that provides a roadmap that will guide the future direction for the island's residents and its growth. A balanced Interim Instream Flow Standard (IIFS) for North Fork Wailua that meets the needs of the uses noted above is critical for the residents of Kauai to realize the goals and objectives articulated in the updated general plan that was recently adopted by the community. I hope that you will conclude likewise.

Thank you for allowing me to present my position on this important matter.

Mahalo,



Wade Lord

**55) Timothy Eliel Starbright, July 12, 2018**

**From:** [Eliel Starbright](#)  
**To:** [DLNR.CW.DLNR.CWRM](#); [DLNR.Comms](#)  
**Subject:** Fwd: The Wailua ahupua`a and ecosystem is seriously compromised by the massive out-of-the-ahupua`a diversion of the Wailua river system!  
**Date:** Thursday, July 12, 2018 3:08:09 PM


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Subject: The Wailua ahupua`a and ecosystem is seriously compromised by the massive out-of-the-ahupua`a diversion of the Wailua river system!

To: [dlnr.cwrn@hawaii.gov](mailto:dlnr.cwrn@hawaii.gov), [dlnr.comms@hawaii.gov](mailto:dlnr.comms@hawaii.gov)

To Whom it Concerns:

The Wailua ahupua`a and ecosystem is seriously compromised by the massive out-of-the-ahupua`a diversion of the Wailua river system. Restoration of mauka-to-maka- river flow must begin now, following the precedence set by the Maui water decision. No more diversion of Kalo and Community Streams, like Wai`ale`ale and Waikomo Streams. No more diversion of important Habitat Streams, like Wai`ale`ale and Waikomo Streams. No more diversion of Public Use Streams, like Wai`ale`ale and Waikomo Streams. No more diversion of Other Streams for previous water needs. Only current, justified irrigation water diverted for current agricultural use can be considered, not perpetuation of sugar's furrow-flood amounts. Thank you for considering use of Wailua waters through the wise filter established by the Commission in the June, 2018 decision and considering restoration of undiverted, mauka-to-makai stream flow in the North Fork Wailua River system and only justified use of irrigation water for agriculture.

Timothy Eliel Starbright 

## 56) Randall Franciso, July 12, 2018

**From:** [randall franciso](#)  
**To:** [DLNR.CW.DLNRCWRM](#)  
**Subject:** Testimony: Instream Flow Standard Assessment Report & Interim Inflow Stream Standards for the Hydrologic Unit of Wailua  
**Date:** Thursday, July 12, 2018 4:22:25 PM  
**Attachments:** [Water Commission Testimony July 13 2018.docx.pdf](#)

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From Randall Francisco, Hanapepe, Kauai, Hawaii

E-mail: [dlmr.cwrm@hawaii.gov](mailto:dlmr.cwrm@hawaii.gov)

July 12, 2018

Ms. Suzanne D. Case, Chairperson  
Commission on Water Resources Management Kalanimoku Building  
1151 Punchbowl St., Room 227  
Honolulu, Hawai'i 96813

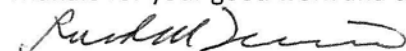
Dear Ms. Case and Members, Commission on Water Resource Management:

**RE:** Re: Instream Flow Standard Assessment Report & Interim Inflow Stream Standards for the Hydrologic Unit of Wailua

My name is Randall Francisco, and I am a resident of Hanapepe, Kauai. Thank you for the opportunity to submit testimony regarding this important matter. I am from West Kauai and remember growing up and knowing of my relatives' and father's coworkers who were employed at the sugar plantations throughout the island. Many of them were immigrants and first or second-generation Filipino men who came to Hawaii/Kauai to work at the sugar plantations. Many were also "ditch men" whose primary responsibility was to insure that the ditches were properly maintained so that the water was flowing properly throughout the vast irrigation – ditch system. They also worked at the various reservoirs to insure that these too were properly maintained.

As a child growing up and later in my teens and post-college years, I came to appreciate the importance and value of what these humble laborers did all day. Oftentimes they worked in remote locations where they had no one else to work with and communicate with all day until they were picked-up by *lunas* close to the end of the workday to return to the plantation. Many of them did this physical work for two, three and some, even for four decades. I understand the need and importance to insure water diversion that is, and, must be done, properly, fairly, and, equally. This is especially true and a reminder to me at a recent Fourth of July event and visit of some farmers in Hanapepe Valley who continue to rely on the rivers and streams to bring fresh water to their *lo'i* and other farm areas. This includes ornamental flowers, and other horticulture and agriculture-based small business/small farm industries that help to diversify their lifestyle and income stream. In thinking ahead and of the future, I ask that KIUC's request be given thoughtful and serious analysis and consideration for water that supports their important work in providing an important resource that is part of their diversified and exemplary portfolio of alternative energy and continues Kauai's pathway towards energy self-reliance and fossil-fuel independence. KIUC and Kauai continues to demonstrate the highest level and well-deserved national recognition for the important vision that keeps Kauai at the forefront of innovative and leadership-based alternative energy platforms that are examples of models for communities across the country and the world.

Mahalo for your good work and the opportunity to testify. Aloha.

  
Randall Francisco, Kauai Hawaii

**57) Sierra Club Kaua'i Group, Rayne Regush, July 13, 2018**

**From:** [rayneregush@aol.com](mailto:rayneregush@aol.com)  
**To:** [DLNR.CW.DLNR.CWRM](#)  
**Cc:** [marti.townsend@sierraclub.org](mailto:marti.townsend@sierraclub.org)  
**Subject:** Comments on Draft PR-2018-05 Instream Flow Standard Assessment Report  
**Date:** Friday, July 13, 2018 10:28:55 PM  
**Attachments:** [SC-CWRM-Instream Flow Standards Wailua JULY13-2018.pdf](#)

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Please find attached comments from Sierra Club Kauai Group on the Draft Instream Flow Standard Assessment Report (Wailua).

And, would you kindly confirm your receipt of this email.

Mahalo,  
Rayne Regush  
on behalf of the Sierra Club Kauai Group  
808 [REDACTED]



**SIERRA CLUB OF HAWAII'  
KAUA'I GROUP**

*MALAMA I KA HONUA  
Cherish the Earth*

July 13, 2018

[VIA email: [dlmr.cwrmm@hawaii.gov](mailto:dlmr.cwrmm@hawaii.gov)]

Commission on Water Resource Management  
State Department of Land and Natural Resources  
P. O. Box 621  
Honolulu, HI 96809

RE: Draft PR-2018-05 Instream Flow Standard Assessment Report (IFSAR) - Waikoko and  
North Fork Wailua Streams, Kaua'i

Aloha Commissioners:

Sierra Club Kaua'i Group appreciates the opportunity to submit comments on the above  
referenced draft report and look forward to Commissioner's subsequent amendments.

**Chapter 12 – Protection of Traditional and Customary Hawaiian Rights**

The obligation to identify and protect traditional and customary Hawaiian cultural practices  
and appurtenant water users falls on the Commission, not on the cultural practitioners  
(under *Ka Pa'akai*). Therefore, the IFSAR be amended accordingly.

The burden of proof is on applicants/developers for commercial uses of public trust  
resources to establish that non-public trust water uses (including agriculture) will not harm  
traditional and customary native Hawaiian rights. The *Kaua'i Springs, Inc. v. Kaua'i  
Planning Commission* case confirmed that applicants "have the burden to justify the  
proposed water use in light of the trust purposes."

**Chapter 13 – Non-instream Uses**

According to the Hawai'i Supreme Court "private commercial use, including commercial  
agriculture, is not a public trust purpose" under *Waiola O Molokai, Inc.* (Haw. 2004).  
Therefore, agricultural and commercial water uses, including water use for Important  
Agricultural Lands (IAL) should not infringe on Hawaii's four public trust uses of water:

- 1) water resource protection, which includes "the maintenance of waters in their  
natural state";
- 2) domestic use protection, particularly drinking water;
- 3) the exercise of native Hawaiian and traditional and customary rights; and
- 4) reservations of water to the Department of Hawaiian Home Lands.

Sierra Club of Hawai'i, Kaua'i Group | PO Box 3412, Lihue, Hawai'i 96766 | [hi.sierraclub.org](http://hi.sierraclub.org)

*Emailed correspondence reduces paper waste. If you do print this letter, please recycle. Mahalo.*

Ditch diversions/irrigation water for agriculture must not compete with public trust uses.

### **Impacts from Historic Diversions to Cultural Resources**

Hawaiian traditional and cultural practices mauka and makai, depend on instream flows and freshwater flows to the coastal environment. Two studies prepared for KIUC provide relevant information which should be incorporated into the IFSAR. The documents address impacts related to recreation, ecosystems, aesthetics and biological resources.

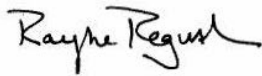
- Nicole Ishihara and Hallett H, Hammatt, Cultural Surveys Hawai'i, Inc" Draft Cultural Impact Assessment for Kaua'i Island Utility Cooperative Blue Hole Diversion Long-Term Lease Project, Wailua and Hanama'ulu Ahupua'a, Lihu'e District, Kaua'i (October 2017)
- Kehaulani Kekua and A. 'Aikane Alapa'i, Native Kaua'i, LLC, "A Cultural Study: Native Hawaiian Traditions, Customary Practices and Perspectives of the Natural and Cultural Resources of Puna, Kaua'i Island, Waiahi Hydropower Systems," (April 2010)

### **Wai'ale'ale and Waikoko Streams**

Streams located in the State Forest Reserve (Wai'ale'ale Stream and Waikoko Stream) which are culturally significant too, deserve the highest degree of protection and should not be diverted except for traditional taro loi.

Mahalo for your consideration.

Sincerely,



Rayne Regush, Executive Committee Member  
on behalf of the Sierra Club Kaua'i Group, Hawai'i Chapter

cc: Marti Townsend, SC Hawai'i Chapter

**58) Joan Heller, July 13, 2018**

**From:** [Joan Heller](#)  
**To:** [DLNR.CW.DLNR.CWRM](#)  
**Subject:** Water resource State management control flow  
**Date:** Friday, July 13, 2018 10:34:45 AM

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To DLNR,

As a community member on Kauai I request all island streams be directed to "full restoration" for the common good of residents.

The land restoration starts with water availability to aid in soil nutrients and quality for agricultural preservation, whatever production scale.

I look forward to your agency's August visit to Kauai, please consider a public hearing for an opportunity to update our community on your decisions forthcoming.

Gratefully, joan heller

[Redacted signature block]

**59) Don Heacock, Division of Aquatic Resources, July 13, 2018**

**From:** [Don Heacock](#)  
**To:** [DLNR.CW.DLNR.CWRM](#)  
**Cc:** [Neilson, Brian J](#); [Nalesere, Katie T](#); [Hau, Skippy](#); [Case, Suzanne D](#)  
**Subject:** New IIFS for the Wailua River Hydrologic Unit 2040 Kauai: my comments and recommendations (attached)  
**Date:** Friday, July 13, 2018 11:03:13 AM  
**Attachments:** [CWRM Waialeale Waikoko Recommended IIFS.docx](#)

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Hawaii Division of Aquatic Resources  
Dept. of Land & Natural Resources  
3060 Eiwa Street, Room 306  
Lihue, Kauai, Hawaii 96766  
[donald.e.heacock@hawaii.gov](mailto:donald.e.heacock@hawaii.gov)  
Cell: 808-645-0532

Commission on Water Resource Management 10 July 2018  
Hawaii Department of Land & Natural Resources  
P.O. Box 621 Honolulu, Hawai'i 96809  
[dlnr.cwrwm@hawaii.gov](mailto:dlnr.cwrwm@hawaii.gov)

**Subject: Establishing new Interim Instream Flow Standards for Wailua Hydrologic Unit 2040 (Waialeale and Waikoko Streams), Kauai**

Aloha Commissioners:

As the Kauai district aquatic biologist (1981 to present) I strongly recommend that you classify Waialeale and Waikoko Streams as **"Taro and Community Streams"**<sup>1</sup> for the following reasons:

1) Designation of these two streams as "Taro and Community Streams" will protect all public trust instream uses; the current use of water diverted from these two streams is for agriculture and hydropower development (produces only 1% of the islands power) of which neither is a public trust use.

According to published works by Patrick Kirch and Sam Gon, III, there was once about 1,000 acres of taro in the Wailua River watershed in 1778. The entire Puna district, including the Wailua River watershed, had about 3,000 acres of taro, making the Puna district the "taro basket of Kauai". Taro pondfields or lo'i, unlike other forms of agriculture, are multi-functional because they:

- a. produce abundant food (taro is the most resilient crop and withstands hurricanes, flooding and fire),
- b. provide feeding and nesting habitat for three species of endangered Hawaiian waterbirds (Koloa, 'Alae ula and I'o),
- c. function as "the kidneys of the watershed" by trapping and recycling terrigenous sediments, woody debris and leaf litter during heavy rainfall periods, thereby protecting the adjacent coral reefs from these potential environmental pollutants,
- d. they return 90-95% of the diverted water back into the stream of origin.

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<sup>1</sup> Kudos to the CWRM for establishing "Taro and Community Streams" on Maui recently, by classifying Waialeale and Waikoko Streams as "Taro and Community Streams" it would prohibit all non-taro cultivation diversions, except for traditional Loko wai (freshwater fishponds) and presumably the existing diversion that supplies water to Wailua Reservoir.

2) Although all streams and rivers are sacred to native Hawaiians, Waialeale Stream is of special cultural and spiritual significance as exemplified by the fact that every entrance chant given by every Hula Halau in the world begins with mentions of the sacred waters of Waialeale. It was for this reason that Kapuna Mabel Mekanani declared her use of the sacred pool and the waters of Waialeale which she recorded as required by the Hawaii Water Code (1988). Also, the Wailua River watershed was the favorite ahupua'a of former Queen Deborah Kapule Kekaiha'akulou (1798-1853), the last Queen on Kauai, even though she was born in Waimea, Kauai.

3) The critically endangered freshwater snail, *Errina newcombi*, is found only on Kauai, and only in 5 stream systems, including Waialeale and Waikoko Streams, where it is abundant in springs and seeps but during prolonged summer low-flows, can reach very high densities ( $>100/m^2$ ) in the main stream channel (pers. observations).

Additionally, according to Kupuna<sup>2</sup> that I spoke with in 1981-1983 regarding the biology and ecology of native Hawaiian stream animals, native 'o'opu (nakea and nopili) and 'opae kalaole were abundant in all the streams in the Puna district, including Waialeale and Waikoko, but these important biological and cultural resources became rare or disappeared shortly after smallmouth bass were introduced by the State of Hawaii in 1956. There are known scientific methods to the eradication of the invasive smallmouth bass, but so far our department has lacked the political will to do so. It is important to note that the underpinnings of the federal Clean Water Act (CWA) are "to protect or to restore the natural biological integrity of streams and other water bodies". CWRM, DAR, and the US Fish & Wildlife Service should work together to accomplish the restoration of biological integrity in Waialeale and Waikoko Streams.

4) Because the "run of the river" hydropower facilities often have significant negative impacts (entrainment, impingement, nitrogen supersaturation causing "gas bubble disease and death") on migratory fish, and anadromous species in general, the hydroelectric facility located at Wailua Reservoir should have a rotating fish screen installed at the head of the diversion (to keep fish in the stream and not allow them to be entrained into the reservoir or into the hydropower penstock) and have the tailrace modified to prevent upstream migrating juvenile 'o'opu or 'opae from being entrained into the tailrace that is supersaturated with nitrogen and lethal to fish.

Finally, I strongly recommend that the CWRM direct the CWRM staff to work with the DAR, through a MOU or MOA if necessary, to develop a comprehensive and strategic "**Hawaii Stream Protection and Restoration Plan**" that protects and restores the biological integrity of Hawaiian streams. Since the CWRM staff has been working on a draft "Stream Protection and Management Plan" (SPAM) for well over

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<sup>2</sup> Annie Andrade (Ho'opii); Ipo Haumea; Jackie Hashimoto; Kimo Kaohe

20 years, and since there are no fisheries biologists on the CWRM staff, it is clear that they need some help with this plan.

Sincerely,

Donald E. Heacock, Kauai District Fisheries Biologist

**60) Kaua'i Island Utility Cooperative, David Bissell, July 13, 2018**

**From:** [Tokioa, Beth](#)  
**To:** [DLNR,CW,DLNRCWRM](#)  
**Subject:** Additional testimony from KIUC re: Instream Flow Standard Assessment Report for the Hydrologic Unity of Wailua  
**Date:** Friday, July 13, 2018 11:22:25 AM  
**Attachments:** [KIUC D Bissell Testimony to CWRM June13,2018 .pdf](#)

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Original will follow via USPS.

Mahalolo!

*Beth Tokioka  
Communications Manager  
Kaua'i Island Utility Cooperative  
4463 Pahe'e Street, Suite 7  
Lihu'e, Hawaii 96766  
Ph: (808) 246-4348*





July 13, 2018

Ms. Suzanne D. Case, Chairperson  
Commission on Water Resources Management  
Kalanimoku Building  
1151 Punchbowl St., Room 227  
Honolulu, Hawai'i 96813

Re: Testimony submitted by Earthjustice regarding Draft Instream Flow Standard Assessment Report  
for Wailua, Kaua'i

Dear Chair Case and Commission members:

Aloha. While we have previously submitted comments to the commission on the subject report, testimony recently submitted by Earthjustice compels us to respond.

It is unfortunate that Earthjustice did not request information from KIUC about its hydro and solar facilities before submitting its testimony, which contains numerous misstatements and/or mischaracterizations. For example, Earthjustice states *"Further inquiry into the reports that KIUC files with the state Public Utilities Commission indicates that KIUC does not consider the Waiahi plants essential to its available generating capacity: in its listing of facilities that comprise 'KIUC's 2018 system generating capacity and total firm peak system demand,' KIUC does not bother to include the Waiahi plants."*

This statement demonstrates a lack of understanding of basic energy concepts and definitions on the part of Earthjustice. The annual Adequacy of Supply filing is intended to list "firm capacity" plants only. Hydro, along with most of the solar power installations on Kaua'i, are "energy-only" plants and cannot be counted on to provide "firm capacity" due to the fact that their output depends on weather.

This does not mean that KIUC does not consider the Waiahi plants essential, just as it does not mean that KIUC does not consider all of the solar plants on Kaua'i essential. In actuality, the opposite is true: every single hydro and solar resource on Kaua'i is critical to meeting state-mandated renewable targets, saving money for ratepayers, and providing cleaner air for the island. The Annual Adequacy of Supply filing is not a valid measure of whether a resource is "essential to available generating capacity."

On page 6, Earthjustice states *"About 20 million gallons of water per day ("mgd") are diverted from Wai'ale'ale and Waikoko Streams, which is a sizable amount compared to other streams across Hawai'i."* The quantity of 20 mgd is not accurate, and is much higher than what is actually diverted from those two streams. In fact, KIUC's revocable permit only allows up to 14.2 mgd. Monthly reports to the state indicate that actual diversion amounts have been less: closer to 13.47 mgd. Several other assertions made by Earthjustice based on diversion of 20 mgd are therefore inaccurate and invalidated.

Earthjustice states on page 7: *"This translates to about 37 kW per 1 mgd of diverted streamflow. For perspective, 37 kW is equivalent to only about five residential rooftop solar systems (at a typical size of around 7 to 8 kW per system)"* This is a completely invalid comparison and reveals a fundamental misunderstanding on the part of Earthjustice of power generating capacity vs actual electricity generation. Rooftop systems only produce power for a few hours each day while hydro produces at a much higher capacity level since it typically generates all day and night. Using Earthjustice's incorrect 20 mgd diverted streamflow figure, they are implying the entire Wailua hydro output could be replaced by 100 residential systems (5 residential systems per mgd times 20 mgd). In fact, replacing the generation from the Wailua hydros would require approximately 800 7kW rooftop systems, each with substantial supplemental battery systems (to store energy for night) and would be at a much higher electricity cost.

To further illustrate the lack of care and diligence by Earthjustice, page 7 states: *"in the past two years, KIUC has opened two utility-scale solar-plus-battery plants of 13 MW and 28 MW, and recently obtained approval for a third 19.3 MW solar-plus-battery plant...The Waiahi plants amount to about 2% of the production of these solar-plus-battery plants..."*

In fact, only one plant is currently open. Assuming all three are eventually built, the Waiahi plant's output will be around 7% of the collective solar-plus-battery plants' output, not 2% as claimed by Earthjustice. The value of such a comparison (one plant versus three plants combined) is questionable as well.

In comments on page 7 comparing the Waiahi hydro plants to the hydro facilities under development by KIUC in Waimea, Earthjustice states: *"Based on KIUC's information, the new hydro facility would be able to produce 34 times more electricity (compared to 0.73 MW) with about half of the diverted flow volume and would be around 62 times more efficient in terms of water use (25 MW from 11 mgd versus 0.73 MW from 20 mgd)."*

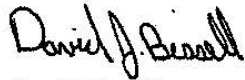
Again, Earthjustice is coming to faulty conclusions due to use of incorrect data, lack of knowledge of the basics of power production, and lack of familiarity with the two systems in question. Most of the energy from the proposed 25 megawatt hydro plant would be the result of solar energy pumping water uphill, not from the flow of diverted water. Comparing the projected energy production from only the diverted water in Waimea to Waiahi, the new facility would produce roughly 6.4 times more energy using the same amount of water diverted from Blue Hole, not 34 times as much as stated by Earthjustice. The west side project is a more efficient user of water because of the greater elevation difference compared to Waiahi. Waimea has a total of 2,950 feet of head over two drops and Waiahi has 460 feet of head over two drops.

Earthjustice also calls into question the efficiency of the Waiahi plants and states on page 8 that KIUC should “*retire less efficient plantation-era hydro plants, or at least modernize them to minimize or avoid their negative impacts.*” The fact is that the Waiahi hydro plants are highly efficient hydroelectric power plants. The Lower Waiahi plant uses a Francis turbine that has shown through recent testing that it has an overall efficiency of 72%. In 2004, the Upper Hydro turbine was found to have degraded efficiencies and was replaced with a new Francis turbine generator with a peak efficiency of 85% in 2016. This new unit is the highest efficiency that can be obtained from a small hydro turbine.

There are several other misstatements and mischaracterizations in the Earthjustice testimony, which we would be happy to review with you in detail if you so wish.

Mahalo for the opportunity to comment.

Warm regards,



David Bissell  
President and Chief Executive Officer

cc: Earthjustice  
Office of Hawaiian Affairs

**61) Don Heacock, July 13, 2018**

**From:** [Don Heacock](#)  
**To:** [DLNR.CW.DLNR.CWRM](#)  
**Cc:** [Neilson, Brian J](#); [Nalesere, Katie T](#); [Hau, Skippy](#); [Case, Suzanne D](#)  
**Subject:** Re: New IIFS for the Wailua River Hydrologic Unit 2040 Kauai: my comments and recommendations (attached)  
**Date:** Friday, July 13, 2018 11:53:15 AM

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Re: IIFS for Waialeale and Waikoko Streams

An amendment/addition to my earlier comments regarding this subject:

"Where water is currently diverted into Wailua Reservoir, the IIFS at the point of this diversion should be set at Q70 or H90. The freshwater inflow to the Wailua River estuary drives the productivity of nearly 100 estuarine dependent fish and crustacean species that are economically, ecologically and culturally important public trust fishery resources."

Sincerely,  
Donald E. Heacock

On Friday, July 13, 2018, 11:03:09 AM HST, Don Heacock <[koadonheacock@yahoo.com](mailto:koadonheacock@yahoo.com)> wrote:

**62) Kaua'i Department of Water, Bryan Wienand, July 13, 2018**

**From:** [Wienand, Bryan](#)  
**To:** [DLNR, CW, DLNR CWRM](#)  
**Cc:** [Strauch, Ayron M](#); [Pearson, Jeffrey T](#)  
**Subject:** Testimony from County of Kauai Department of Water - Wailua IIFS  
**Date:** Friday, July 13, 2018 12:13:57 PM  
**Attachments:** [KDOW 7-12-18 Letter to CWRM for IIFS for Wailua-FINAL071318.pdf](#)

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Aloha Ms. Case and Commission Members,

On behalf of the County of Kaua'i Department of Water, we respectfully submit the attached testimony regarding the Instream Flow Standards for the Wailua hydrologic unit on Kaua'i. Please feel free to contact me if you have any questions or comments.

Thank you,  
Bryan

***Bryan Wienand***

Manager & Chief Engineer, P.E.  
County of Kaua'i  
Dept. of Water  
Phone (808) 245-5403  
[bwienand@kawaiwater.org](mailto:bwienand@kawaiwater.org)





*Water has no substitute.....Conserve it*

July 13, 2018

Ms. Suzanne D. Case, Chairperson  
Commission on Water Resources Management  
Kalanimoku Building  
1151 Punchbowl St., Room 227  
Honolulu, Hawai'i 96813

**Subject: Instream Flow Standard Assessment Report & Instream Inflow Stream Standards for the Hydrologic Unit 2040: Wailua, Kaua'i, Hawai'i**

Dear Ms. Case and Commission Members:

Thank you for the opportunity to provide comments on the subject report. On behalf of the Department of Water, County of Kaua'i (DOW), we greatly appreciate the time and effort that the Commission on Water Resources Management (CWRM) has dedicated in evaluating the complexities of surface water dynamics in the Wailua hydrologic unit. Moreover, as a water utility, we recognize the tremendous responsibility that the CWRM has in determining and implementing standards which balance a wide variety of needs.

The DOW's primary interest in this matter relates to any potential impacts to the available amount of source water at the Kapaia Reservoir. As you are aware, this reservoir is the source for the Waiahi Surface Water Treatment Plant (SWTP), which, in turn is a major source of potable water for the Puhi-Lihu'e-Hanamā'ulu public water system. The capacity of the Waiahi SWTP is 3.0 million gallons per day (MGD) and average day usage is approximately 2.3 MGD.

We understand that a complete watershed analysis has not been completed for the Wailua hydrologic unit and we would greatly appreciate the opportunity to review and comment on any new information that becomes available from such an analysis. Our evaluation of the information provided in the subject report indicates that any proposed modifications to the instream inflow stream standards (IIFS) of the North fork of the Wailua River would have a negative but minimal effect on the volume of water that currently flows to the Kapaia Reservoir. While it does not appear that it would have a substantial effect, the potential impact does not appear to have been quantified. Therefore, in the future, should more data become available, the DOW would seek to ensure that there would not be a substantial decrease in the flows to the Kapaia Reservoir. By comparison, any proposed modifications to the IIFS of the Waikoko stream do not appear to have any negative impacts on the volume of water that currently flows to the Kapaia Reservoir, because both the Waikoko stream and Ili'ili'ula-North Wailua ditch eventually converge and supply the Hanamā'ulu ditch, which, in turn supplies water to the Kapaia Reservoir.

Lastly, we would like to recognize that any proposed modifications to the IIFS of the North fork of the Wailua River or the Waikoko stream would potentially affect the hydroelectric energy that is generated by KIUC's Upper and Lower Waiahi hydroelectric plants. As a non-profit organization, the DOW respects and appreciates KIUC's ongoing efforts to provide clean, renewable energy via the existing diversions at Waikoko and the North fork of the Wailua River. These diversions help to supply the Upper and Lower Waiahi hydroelectric plants, which result in a cost savings of approximately \$1.75 million per year for KIUC's 24,500+ member-owners. Additionally, KIUC provides regular maintenance of the diversions and ditch systems downstream from the diversions, which helps to ensure that flows to the Kapaia Reservoir are not reduced.

Ms. Suzanne D. Case, Chairperson

Subject: Instream Flow Standard Assessment Report & Instream Inflow Stream Standards for the Hydrologic Unit 2040: Wailua, Kaua'i, Hawai'i

July 13, 2018

Page 2 of 2

We respectfully request that these issues be strongly considered in evaluating any potential modifications to the IIFS of the North fork of the Wailua River and the Waikoko stream. Thank you again for your hard work and dedication to serving the public in establishing interim instream flow standards for the Wailua hydrologic unit. We greatly appreciate your efforts and commit to work with you as we strive to fulfil our own commitment to provide safe, affordable, and sufficient drinking water to the people of Kaua'i through wise management of our resources.

Should you have further questions regarding this matter, please contact me at (808) 245-5403 or via email at [bwienand@kauaiwater.org](mailto:bwienand@kauaiwater.org).

Sincerely,



Bryan Wienand, P.E.  
Manager and Chief Engineer

### 63) Ana Mohamad DesMarais, July 13, 2018

**From:** [Ana Mohamad](#)  
**To:** [DLNR.CW.DLNR.CWRM](#)  
**Subject:** Water rights on Kauai due today  
**Date:** Friday, July 13, 2018 1:25:20 PM

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To whom it may concern,

If the private sector is receiving funds for the use of their infrastructure then the public trust should receive funds for the use of their resources. What is happening on Kauai is a full breach of code and obligation to the public trust which is set to entrust the protection of our natural resources. We need to be in compliance with the ethical practice of capitalism where exploitation is prohibited. Please adjust procedure to allow for revenue stream for the use of water (and all natural resources) to directly serve those that have populated the land for generations and generations so that we may sustain for generations into the future. We are in breach of the laws that created us and must make any and all efforts to be in compliance. We are founded upon the principles of Liberty and Justice for All. Thank you for your deep consideration on this matter.

AloHa & MaHaLo,  
Ana  
Ana Mo Des  
Ana Mohamad DesMarais  
Kalaheo resident on Kauai

**64) Robert & Marion McHenry, July 13, 2018**

**From:** [bob-marion@hawaiiantel.net](mailto:bob-marion@hawaiiantel.net)  
**To:** [DLNR Comms](#); [DLNR.CW.DLNRCWRM](#)  
**Subject:** Water rights for Hawaiian homes in Wailua  
**Date:** Friday, July 13, 2018 2:09:43 PM

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Commission on Water resources,

The current situation on Kauai is not right! I urge you to rectify this problem and give priority of water rights to the Department of Hawaiian Homelands.

DHHL has priority water rights, yet on Kauai, 600 Hawaiians on the Wailua Waitlist have been kept landless for a decade, being told there is not enough water for them, causing DHHL to develop their own wells, while county water is carried through their land to Coco Palms, Wailua houseslots and Kapaa, with surplus available to supply DHHL's full potable water need.

In 2017, after DHHL spent millions on production water well development, Kauai Water Dept manager admitted there is water available for DHHL, and that they "should come back and talk to us" and quickly retired.

The county has intentions of locating the Lydgate municipal wastewater treatment plant for 15,000 residences mauka, out of tsunami zone, to right in the middle of DHHL's planned residential home development in Wailua.

No drinking water for 600 Hawaiian homes, but they get to receive the wastewater from 15,000 residences.

The source of the drinking water is surface water from Wai'ale'ale, stream water from Wai'ale'ale, Waikiko, 'Ili'ili'ula, Waiaka and Waiahi Streams, 3 million gallons processed into drinking water at the Waiahi Surface Water Treatment Plant at Kapaia Reservoir and sold to the Kauai Water Department.

But no drinking water for Hawaiians.

How can the county put a waste water treatment facility in the middle of Hawaiian homelands?

We sincerely hope that the right thing can be done here on Kauai.

Mahalo,

Robert and Marion McHenry

[REDACTED]

[REDACTED]

[REDACTED]

**65) Kia'i Wai O Wai'ale'ale, Bridget Hammerquist, July 13, 2018**

**From:** [Bridget Hammerquist](#)  
**To:** [DLNR.CW.DLNR.CWRM](#)  
**Cc:** [Strauch, Ayrton M](#)  
**Subject:** Kia'i Wai Comments to draft IFSAR  
**Date:** Friday, July 13, 2018 3:54:59 PM  
**Attachments:** [Kia'i Wai Final Comment 7-13-18.pdf](#)

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Aloha,

Attached please find comments submitted by Kia'i Wai `O Wai`ale`ale to CWRM's draft IFSAR.

Mahalo nui loa,  
Bridget Hammerquist  
(808) [REDACTED]



This email has been checked for viruses by Avast antivirus software.  
[www.avast.com](http://www.avast.com)

**To:** Commission on Water Resource Management  
State Department of Land and Natural Resources  
P.O. Box 621  
Honolulu, Hawai‘i 96809.  
E-mail: dlnc.cwrmm@hawaii.gov

**From:** Kia‘i Wai O Wai‘ale‘ale

**Re:** Kia‘i Wai O Wai‘ale‘ale Comments on the Draft Revised Instream Flow Standard Assessment Report, Waikoko and North Fork Wailua streams, on Kaua‘i

**Introduction:** On May 30, 2018, the Commission on Water Resource Management posted a revised draft Instream Flow Standard Assessment Report, Wailua, Kaua‘i (IFSAR). The IFSAR will create amendments to the interim instream flow standards for the surface water hydrologic unit of Wailua (2040) – Waikoko and North Fork Wailua streams, on Kaua‘i. On June 21, 2018, CWRM staff held a public fact gathering meeting. Public comments on the draft IFSAR are accepted through July 13, 2018.<sup>1</sup> The following consists of comments to the draft IFSAR.

**Comments:**

Mahalo for your work in assembling the revised draft Instream Flow Standard Assessment Report for Waikoko and North Fork Wailua streams (IFSAR). I am writing on behalf of Kia‘i Wai O Wai‘ale‘ale (Kia‘i Wai), a community organization based on Kaua‘i. We support the Commission on Water Resource Management’s (Commission) decision to amend the interim instream flow standards for Wailua, Waikoko and North Fork Wailua streams.

We strongly recommend designating both Wai‘ale‘ale and Waikoko Streams as "Taro and Community Streams" and "Habitat Reference Streams" because the streams at issue are in the forest reserve and mandates preservation for the highest public use and access. The waters from Wai‘ale‘ale and Waikoko Streams are highly revered and are culturally sacred sites. Hawaiian practitioners and Hula Halaus regularly make the trek to visit these locations. Neither Waikoko or Wai‘ale‘ale Streams should have any diversions, other than traditional taro and loko wai diversions (as CWRM just did on Maui).

Kia‘i Wai members offered oral comments at the June 21, 2018 Public Fact Gathering Meeting and now supplement them with the following:

**1. Only public trust uses of water must be prioritized for protection.**

IFSAR Section 13.0 "Non-instream uses" troublingly includes the Hawai‘i Farm Bureau position that "agriculture is a public trust entity worthy of protection, as demonstrated in its inclusion in the State Constitution."<sup>2</sup> To the contrary, the Hawai‘i Supreme Court has reiterated "private commercial use, including commercial agriculture, is *not* a public trust purpose."<sup>3</sup> In Hawai‘i, there are four public trust

<sup>1</sup> See "Public Input Sought on Instream Flows For Wailua, Waikoko Streams – Fact-Gathering Meeting Scheduled on June 21 in Lihue" Governor of the State of Hawai‘i website (Jun. 18, 2018) *available at*: <https://governor.hawaii.gov/newsroom/latest-news/public-input-sought-on-instream-flows-for-wailua-waikoko-streams-fact-gathering-meeting-scheduled-on-june-21-in-lihue/>

<sup>2</sup> IFSAR at 73 citing Hawai‘i Const. art. XI, §3.

<sup>3</sup> *In re Waiola O Molokai, Inc.*, 103 Hawai‘i 401, 429, 83 P.3d 664, 692 (2004) citing *In re Use Permit Applications*, 94 Hawai‘i 97, 9 P.3d 409 (2000) (*Waiāhole I*).

uses of water which “the Commission is duty-bound to protect against competing interests in the State’s water resources:”

- (1) water resource protection, which includes “the maintenance of waters in their natural state”;
- (2) domestic use protection, particularly drinking water;
- (3) the exercise of native Hawaiian and traditional and customary rights and;
- (4) reservations of water to the Department of Hawaiian Home Lands (DHHL)].<sup>4</sup>

**Agricultural and commercial uses of water are not protected public trust uses and must not infringe on the latter.**

Section 13.0 includes an extensive discussion of agricultural enterprises and Important Agricultural Lands (IAL), which supports the assertion, “Water is crucial to agriculture and agricultural sustainability”, implying that it is a public trust use requiring equal protection to four public trust uses stated above. The conveyance of irrigation water to downstream points of diversion is one of nine recognized, non-exclusive in-stream uses (HRS § 174C–3), however, water availability for agriculture is not a constitutional mandate and should not be framed as such. The IFSAR’s improper privileging of agriculture may impermissibly allow irrigation ditch uses of Wailua waters to compete with public trust uses.

The IFSAR would hopefully also include an updated statement on the existence of IAL lands in the Wailua hydrologic unit. Currently, it references IAL lands comprising five percent of “Ukumehame” lands in West Maui, which appears to be a typo. IFSAR at 85. We note that on February 25, 2013, the state Land Use Commission (LUC) granted Grove Farm’s petition to designate over 11,000 acres as IAL.<sup>5</sup> Grove Farm’s Līhu‘e IAL petition area appears to include part of the Wailua hydrologic unit no. 2040.<sup>6</sup> It would be informative if the IFSAR included an explanation that the gauging and reports of volume of surface water use has been based primarily on gauge measurements from the ditches that carry the diverted water. There has been very little in-stream flow measurements before the current study.

## **2. The burden of identifying and protecting traditional and customary Hawaiian cultural practices is on the Commission and not on the cultural practitioners.**

Please revise the statement made in the draft IFSAR under “12.0 Protection of Traditional and Customary Hawaiian Rights” as it pertains to Hawaiian water rights:

“In those cases where a Commission decision may affect an appurtenant right, it is the claimant’s duty to assert the appurtenant right and to gather the information required by the Commission to rule on the claim. The Commission is currently in the process of developing a procedural manual to aid in the understanding and assembling of information to substantiate an appurtenant rights claim.”<sup>7</sup>

Many traditional and customary uses of surface waters are held under appurtenant water rights as well as under article XII, §7 of the Hawai‘i Constitution. Hawaiian cultural practitioners, including appurtenant

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<sup>4</sup> *Id.*

<sup>5</sup> *In the Matter of the Petition of Grove Farm Co., Inc.*, “Findings of Fact, Conclusions of Law, and Decision and Order,” LUC Dkt. No. DR12-48 (Feb. 25, 2013) *available at*: <http://luc.hawaii.gov/wp-content/uploads/2012/09/DR12-48-GROVE-FARM-COMPANY-INC-FOF-COL-DO.pdf>.

<sup>6</sup> LUC, Important Agricultural Lands Map, DR12-48 Grove Farm Company, Inc. – Kaua‘i (accessed Jul. 10, 2018) *available at*: [http://luc.hawaii.gov/wp-content/uploads/2012/09/dr1248\\_mapno1a.pdf](http://luc.hawaii.gov/wp-content/uploads/2012/09/dr1248_mapno1a.pdf)

<sup>7</sup> IFSAR at 62 (emphasis added).

water users, do not carry the burden of establishing and claiming their uses before the Commission. Rather, it is the Commission that holds a non-delegable obligation to identify and protect those uses.

Under *Ka Pa'akai*, state agencies such as the Commission “may not act without independently considering the effect of their actions on Hawaiian traditions and practices.”<sup>8</sup> Prior to approving decisions that may allow development of an area or resource, agencies including the Commission must make findings and conclusions on:

“(1) the identity and scope of valued cultural, historical, or natural resources in the petition area, including the extent to which traditional and 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; and (3) the feasible action, if any, to be taken by the LUC to reasonably protect native Hawaiian rights if they are found to exist.”<sup>9</sup>

The burden of ensuring that this analysis is conducted, falls to the Commission and applies to the IIFS amendment process. In its draft Water Use and Development Plan (WUDP), the County of Maui Department of Water Supply (DWS) recognized, “[w]hile a *Ka Pa'akai* analysis is generally performed for a site specific development project, it should also be applied at the planning stage if there are policies or strategies that may affect traditional and customary rights (e.g. water transfers) or if there are location-specific development proposals (e.g. new well construction, diversions, desalination, etc).”<sup>10</sup> As part of its *Ka Pa'akai* analysis, the Maui DWS held community meetings, reviewed the Office of Hawaiian Affairs’ Kīpuka and Papakilo databases, the State Inventory of Historic Places, EISs/ EAs, Land Commission Awards, GIS-based kuleana and appurtenant water uses, and conducted extensive consultation with thirty entities including the Aha Moku Advisory Committee.

Under *Ka Pa'akai*, requisite findings and conclusions are completed independently by the approving agencies and cannot be delegated to applicants. Development proponents and applicants for commercial uses of public trust resources have the burden of affirmatively establishing that non-public trust water uses (e.g. agriculture/irrigation) will not harm traditional and customary native Hawaiian rights. In the context of IIFS amendments, requiring diverters to provide information relevant to a *Ka Pa'akai* analysis is consistent with *Waiāhole I*, which held “the burden [of establishing a use is consistent with the Commission’s public trust duties] ultimately lies with those seeking or approving such uses to justify them in light of the purposes protected by the trust.”<sup>11</sup> Similarly, in its discussion of agency public trust duties, *Kaua'i Springs, Inc. v. Kaua'i Planning Commission*, 133 Hawai'i 141, 324 P.3d 951 (2014) specified “[a]pplicants have the burden to justify the proposed water use in light of the trust purposes.”<sup>12</sup>

The IFSAR’s assertion that appurtenant rights-holders must establish their claims to the Commission must be revised. No authority requires cultural practitioners to identify harms to their practices as a consequence of water diversions and development and bring them to the Commission.

<sup>8</sup> *Ka Pa'akai O Ka 'Aina v. Land Use Comm'n, State of Hawai'i*, 94 Hawai'i 31, 46, 7 P.3d 1068, 1083 (2000), as amended (Jan. 18, 2001); Hawai'i const. art. XII, §7.

<sup>9</sup> *Id.*, 94 Hawai'i at 47, 7 P.3d at 1084 (footnote omitted).

<sup>10</sup> County of Maui, Draft Plan Section II, Chapters 10 - 13: Water Resource Adequacy, Island Wide Strategies and Recommendations (accessed Jul. 10, 2018) available at: <https://www.mauicounty.gov/DocumentCenter/View/108979/WUDP-Part-II-DRAFT-June-2017?bidId=>

<sup>11</sup> *Waiāhole I*, 94 Hawai'i at 142, 9 P.3d at 454 (emphasis added).

<sup>12</sup> *Kaua'i Springs*, 133 Hawai'i at 175, 324 P.3d at 985 (emphasis added).

**3. Surface water recreational, ecological, aesthetic, and biological resources, are also resources for native Hawaiian traditional and customary practices.**

The IFSAR takes a relatively limited approach to the ways instream flows impact native Hawaiian traditional and customary practices. We appreciate, however, that the IFSAR incorporates the 150,000-270,000 gallons per day (gpd) calculations of the 2007 U.S. Geological Survey study of wetlands kalo cultivation and hope those figures are utilized, as opposed to 6,600 gpd figure used for flooded taro lo'i on page 90 of the Ukumehame IFSAR.<sup>13</sup>

For instance, the IFSAR noted "Wailua supports an abundance of native dragonflies (*Anax junius*) and native damselflies" and [s]treamflow restoration may increase insect biota diversity." *Id.*, at 38. The State included the pinao 'ula (damselfly) in the Natural Area Reserves System logo to "represent[] aquatic ecosystems" and acknowledges its presence "is indicative of a healthy ecosystem[.]"<sup>14</sup> Biota such as damselflies and o'opu are also cultural resources. "Insects were significant in [historical] Hawaiian culture, the creation chant, *Kumulipo*, mentions many native insects. Some served as food for Native Hawaiians, dragonfly nymphs were used in indigenous rituals, and certain caterpillars and other insects were honored as 'aumākua (guardian spirits)."<sup>15</sup> "Pinao" refers to dragonflies, while "pinao'ula" may refer to damselflies and certain varieties of dragonflies.<sup>16</sup> Hawaiian language includes several names for immature dragonflies and damselflies, including "lohelohē," "lohaloha," "pua 'alohelohe," and "olopeloe."<sup>17</sup> Hawaiian damselfly researchers observed, "Hawaiians certainly appreciated and valued these animals far more than we do now, as demonstrated by the fact that they sometimes presented the immatures as religious offerings, or pua 'alohelohe[.]"<sup>18</sup>

Such Native Hawaiian cultural resources dependent on instream water flows at Wailua-Waikoko and North Fork have been documented in studies including L. Kehaulani Kekua and A. 'Aikane Alapa'i, Native Kaua'i, LLC, "A Cultural Study: Native Hawaiian Traditions, Customary Practices and Perspectives of the Natural and Cultural Resources of Puna, Kaua'i Island, Waiahi Hydropower Systems," prepared for Kaua'i Island Utility Cooperative (Apr. 2010) (2010 Cultural Study). The 2010 Cultural Study indicates numerous Wailua water sources are traditional sites: Kapakanui Falls, Kapakaiki Falls, Kawi Stream, Keahua Stream, Uhau Iole Stream, Uhau Iole Falls, Wailua River, Waikoko stream, Kaholalele falls, 'Opaeka'a Stream, 'Opaeka'a Falls, and Wailua Falls.<sup>19</sup> The 2010 Cultural Study describes a huaka'i with kumu hula, Hawaiian scholars, and other practitioners to areas watered by Wai'ale'ale. The IFSAR should incorporate the maintenance of storied places necessary to

<sup>13</sup> IFSAR at 63-64 citing Stephen B. Gingerich, Chiu W. Yeung, Tracy-Joy N. Ibarra, & John A. Engott, "Water Use in Wetland Kalo Cultivation in Hawai'i" U.S. Geological Survey and Office of Hawaiian Affairs Open-File Report 2007-1157].

<sup>14</sup> The State of Hawai'i Natural Area Reserves System (NARS) included the damselfly in its logo, which "symbolically weaves together the symbols of NARS; land, water, flora, fauna, and our shared Hawaiian culture." Natural Area Reserves System, Dep't of Land & Nat. Resources, State of Hawai'i, "The Natural Area Reserves System Logo" (Sep. 2013) *available at*: <http://dlnr.hawaii.gov/ecosystems/files/2013/09/NARSC-logo-brief.pdf>.

<sup>15</sup> F.G. Howarth, et.al, *Insects and their kin*, in ATLAS OF HAWAII (3d. ed.) at 140 (1998)).

<sup>16</sup> G.M. Nishida, Hawai'i Biological Survey, "Hawaiian Insect Names," Bishop Museum (Jan. 8, 1998); *see also* (Pukui & Elbert 1986).

<sup>17</sup> Dan Polehmus & Adam Asquith, *Hawaiian Damselflies: A Field Identification Guide* (Hawaii Biological Survey Handbook), at 18 (1996).

<sup>18</sup> *Id.*

<sup>19</sup> 2010 Cultural Study at 9.

maintaining Hawaiian cultural practices as an important instream value and protected public trust use of water.

In addition to lo'i kalo, fishponds, and mauka gathering practices, the IFSAR should take into account makai practices that depend on freshwater flows to the nearshore environment. The IFSAR recognized as recreational "activities that were known to occur or observed at or near Wailua River: pole and line fishing, gill and throw netting, torch and spear fishing, sport diving, canoe paddling, sailing, seaweed collection, body surfing, and board surfing." *Id.* at 40. All of these are Hawaiian cultural practices and their associated water uses are prioritized for protection.

Hawaiian cultural practices include nearshore limu gathering, fishing, netting, diving, surfing, and a plethora of other activities that require maintenance of water quality and a volume of freshwater flow. More extensive consideration of the significance of Wailua environs to Hawaiian cultural practices may redouble the significance imputed to biological species, ecosystem indicators, and recreational activities. The 2010 Cultural Study also emphasized the mauka to makai connections instream flows and cultural practices such as limu gathering, pointing to the line from the Kumulipo "He nuku, he wai ka 'ai a ka lā'au" as expressing the need of limu huluhu waena and the plant 'ie'ie Huluhu to be sustained and nourished by fresh water. *Id.* at 32. The 2010 Cultural Study documented a variety of gathered limu, including Haulelani, a limu grown in lo'i kalo and mountain streams.<sup>20</sup>

Cultural practices also include traditional management of water. Dr. Mehana Vaughan, Assistant Professor of Sustainable Watershed and Coastal Management at the University of Mānoa, reviewed multiple sources on traditional Hawaiian water management principles and applied them to the diversions at Wailua.<sup>21</sup> **Dr. Vaughan recommended restricting diversion of North Fork and Waikoko streams to no more than thirty percent of stream flow at any given time.** We urge the Commission to follow Dr. Vaughan's recommendation.

#### **4. Cultural resources dependent on Wailua instream flows and support historic and potential cultural practices should be included in the IFSAR.**

In addition to *existing* cultural practices, the IFSAR should include an analysis of the breadth of existing and potential cultural *resources* that practitioners may not have been able to access or are in failing condition due to historic and existing diversions. This means giving significance to resources that may not currently be available or used by practitioners and to those that extend from mauka to makai.

Such Native Hawaiian cultural resources dependent on instream water flows at Wailua-Waikoko and North Fork have been documented in studies including the 2010 Cultural Study. Practitioners have identified not only cultural resources, such as 'ohe Hawai'i, 'ohi'a lehua, 'ie'ie, mamaki, 'ekaha, pala'a ferns, and other native plants in these areas, but also that they were in "fragile and failing conditions . . . due to the void of fresh running water which are vital to this Hawaiian forest environment."<sup>22</sup> In the 2017 Cultural Impact Assessment also prepared for KIUC's hydropower project, cultural practitioners pointed to connections between diminishing instream flows and a lack of water for kalo farmers; fresh water aquaculture habitats (including hīhīwai [endemic grainy snail] 'ōpae, pinao, 'ama'ama, frogs, barracuda, pāpio, Samoan crab, and various varieties of 'o'opu); vegetation such as the wī, hau (beach hibiscus), pili, lei materials, and rice reeds; and spawning that occurs at the opening of the river mouth as

<sup>20</sup> *Id.* at 34.

<sup>21</sup> Letter from Dr. Mehana Vaughan, at 2 (Oct. 18, 2016) (Appx. C to the 2017 CIA).

<sup>22</sup> *Id.* at 27.

it drains into the ocean, which is important in circulating nutrients into the sea.<sup>23</sup> Further assessment of Hawaiian cultural practices in coastal areas that are dependent on Wailua - Waikoko and North Fork instream flows would be appropriate to the Commission's burden under *Ka Pa'akai*.

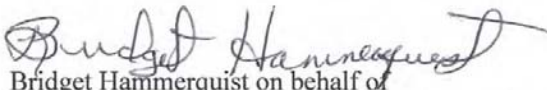


**5. Domestic and commercial uses of the county water supply systems should be disaggregated from each other in assessing diversions to Grove Farm's Waiahi water treatment plant.**

Section 11.0 of the IFSAR recognizes that domestic, particularly drinking water, water uses are public trust uses of water and appears to presume that all water in the Kaua'i County Department of Water's (KDOW) municipal system are used for domestic purposes. KDOW's Wailua-Kapa'a system services hotel and businesses clustered along the highway, as well as schools, agricultural homesteads, and residences.<sup>24</sup> Commercial uses of water are not be afforded the same protections as domestic uses and should be disaggregated from the overall volume of water diverted to the Waiahi water treatment plant in assessing IIFSs.

**6. Irrigation diversions should be assessed from at least a standard of practicable technology.**

The IFSAR indicated significant losses between the Ili'ili'ula Stream and the Upper Waiahi Hydropower penstock.<sup>25</sup> In the discussion of the 1.6 cubic feet per second (cfs) losses, the draft IFSAR should clarify that leaks are from the unlined portions of the open ditch as well as loss through unsealed pani boards at tunnel adits. It should be explained that the Ili'ili'ula Ditch traverses approximately 5 miles before reaching the Waiahi Hydropower Plant and the daily loss is significant. Allocations to these diversions, if any, should be assessed from at least a standard requiring the diverters to use practicable technology, such as lining ditches and sealing pani boards to prevent losses, which will no longer be an issue, assuming these diversions are removed. The other benefit to removal of the two diversions addressed in the draft IFSAR is the probable increase of ground water and aquifer restoration, not to mention improved health of the stream biota as it flows to the ocean.

**Mahalo nui** for your anticipated consideration and revision of the draft IFSAR in accord with the foregoing comments. We look forward to the Commission's amendments to the Wailua IIFSs.

  
Bridget Hammerquist on behalf of  
Kia'i Wai O Wai'ale'ale, a community based organization  
  
(808)   
bridgethammerquist@hawaiiantel.net

<sup>23</sup> Nicole Ishihara and Hallett H. Hammatt, Cultural Surveys Hawai'i, Inc., Draft Cultural Impact Assessment for Kaua'i Island Utility Cooperative Blue Hole Diversion Long-Term Lease Project, Wailua and Hanamā'ulu Ahupua'a, Lihue District, Kaua'i TMKs: Multiple, prepared for KIUC, at 115-16 (Oct. 2017) ("2017 CIA").

<sup>24</sup> KDOW, Water Plan 2020 "Water System Descriptions and Water Demand Forecasting" at 3-3 (Mar. 2001) available at: <http://www.kauaiwater.org/W2020Chap3-4.pdf>

<sup>25</sup> IFSAR at 82.

**66) Debbie Lee-Jackson, July 13, 2018**

**From:** [Debbie Lee-Jackson](#)  
**To:** [DLNR.CW.DLNR.CWRM](#); [DLNR.Comms](#)  
**Subject:** Wailua River IFS Comments  
**Date:** Friday, July 13, 2018 5:18:03 PM

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100% streamflow mauka to makai is essential to satisfy the benefits afforded in the Public Trust Doctrine. The taking of all the water from Waialeale and Waikoko streams (as well as Iliili Ula, Waiaka, Iole and Waiahi streams) and not returning it to the stream of origin causes low to no flow.

There is not enough base flow in the Wailua River to flush the slurry of bacteria where families swim and paddle. Ask any of those families and they will tell of kakio and staff infections.

There is not enough flow to feed needed fresh water to the coral to keep it healthy.

Kayak companies have bullied their way in, taking taro land and water. Businesses should not be able to enjoy public trust water over taro land and water.

All the water needs to go back in its own stream. Priority users should be able to use what they need. Then the others can prove what they need and apply for it.

Public Trust water is held in TRUST for us the beneficiaries and also for our beneficiaries to come.

Mahalo,  
Debbie Lee-Jackson  
Kauai

## 67) Earthjustice, Isaac H. Moriwake, July 13, 2018

**From:** [Lu'ukia Nakanelua](#)  
**To:** [DLNR\\_CW.DUNRCWRM](#)  
**Cc:** [Isaac Moriwake](#); [Leinaala Ley](#)  
**Subject:** Testimony on the IPSAR for Wailua (2040) - EJ Response to KIUC Comments  
**Date:** Tuesday, July 17, 2018 5:14:56 PM  
**Attachments:** [2018-7-17 Reply to KIUC FINAL.pdf](#)

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Aloha mai,

Attached for your review is our response to KIUC's letter dated July 13, 2018 regarding our previous comments dated July 11, 2018.

Please contact us should you have any questions.

Mahalo,

Lu'ukia

V. Lu'ukia Nakanelua  
2018 Summer Law Clerk  
Earthjustice  
850 Richards St., 4<sup>th</sup> Flr.  
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July 17, 2018

Via Electronic Mail

Commission on Water Resource Management  
Kalanimoku Building  
1151 Punchbowl Street, Room 227  
Honolulu, Hawai'i 96813  
dlmr.cwrmm@hawaii.gov

Re: Earthjustice's Reply to KIUC's July 13, 2018 Letter.

Dear Chair Case, Commissioners, and Commission Staff:

Earthjustice has received the letter dated July 13, 2018 from Kaua'i Island Utility Cooperative ("KIUC letter") in response to our previous comments dated July 11, 2018 ("Earthjustice comments") and respectfully requests this opportunity to briefly reply for the record. In general, KIUC protests too much to our input and ends up only discrediting itself. Contrary to KIUC's overheated accusations, Earthjustice's comments simply utilize the publicly available information, including the Commission's Instream Flow Standard Assessment Report ("IFSAR") and KIUC's own regulatory compliance filings and press statements. If KIUC takes issue with this information, such complaints ultimately reflect back on KIUC's long-running and ongoing lack of public transparency and accountability in continuing its plantation-era diversions of Wai'ale'ale and Waikoko Streams.

While KIUC asserts that it is "unfortunate that Earthjustice did not request information from KIUC,"<sup>1</sup> it is KIUC's obligation and burden to fully disclose its operations to the Commission so that documents like the IFSAR can fulfill their actual purpose, and to the public so that KIUC's operations are no longer veiled in plantation-era obscurity and secrecy. KIUC may remain content to accuse members of the public of lacking information held by KIUC, but the public will nonetheless have the opportunity to access all the facts in a full and fair legal process, as necessary.

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<sup>1</sup> Earthjustice staff asked KIUC for a visit of the Waiahi plants, but was told that KIUC "does not offer tours" (although we understand KIUC does it for schools).

KIUC's response is not only misdirected, but also misleading. While hydro uses and energy issues may be relatively new for this Commission, Earthjustice is not impressed or persuaded by KIUC's bluster,<sup>2</sup> and the Commission should not be either. We briefly respond as follows.

#### Non-essential

KIUC accuses others of "a lack of understanding of basic energy concepts" in relation to its "adequacy of supply" reports, yet it is KIUC that demonstrates either such lack of understanding, or more offensively, a belief or hope that no one would be the wiser if it simply misstates the truth. Contrary to KIUC's assertion that such reports are "intended to list 'firm capacity' plants only," industry-standard resource adequacy analyses can and do include hydro plants (and even variable renewable resources such as solar and wind plants).<sup>3</sup> KIUC's misplaced criticism aside, it is particularly revealing that, in contrast to the usual claims about the "firm" benefits of hydro plants, KIUC does not mention the Waiahi plants (or other hydro plants) in its adequacy of supply report, but *does* include the currently operating "Kapaia Solar and Storage" plant.<sup>4</sup>

KIUC's report shows that if the Waiahi plants were retired today, it would have no effect on KIUC's ability to "meet all reasonably expectable demands for service and provide a reasonable reserve for emergencies."<sup>5</sup> Yet, KIUC still insists that "every single hydro and solar resource on Kaua'i is critical." KIUC Letter at 1. KIUC may want to have every single cake and eat it too, and demand that any hydro plant is "critical" simply because it exists, but such an absolutist position is not grounded in the facts including KIUC's own public reports, or any law and policy in either the energy or water resources fields.

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<sup>2</sup> Earthjustice has practiced before the Hawai'i Public Utilities Commission for a decade, as KIUC knows, and also practices in other state and federal utility and energy regulatory commissions across the country.

<sup>3</sup> The resource adequacy or adequacy of supply inquiry addresses whether the utility has adequate generation resources to meet its expected peak demands, including a reserve margin. See, e.g., *infra* note 5 and accompanying text. Although variable renewable plants may produce energy less consistently than "firm" energy plants, they still have "capacity value" that proper resource adequacy analyses should recognize, but KIUC's does not.

<sup>4</sup> See KIUC, 2018 ADEQUACY OF SUPPLY STATEMENT 2 (Dec. 21, 2017), *available at* <https://puc.hawaii.gov/wp-content/uploads/2018/01/Adequacy-of-Supply-KIUC-2018.pdf>.

<sup>5</sup> Haw. Pub. Utils. Comm'n, Standards for Electric Utility Service in the State of Hawai'i General Order No. 7, ¶ 5.3.a (Feb. 19, 1968) (establishing the resource adequacy requirement in Hawai'i), *available at* <https://puc.hawaii.gov/wp-content/uploads/2013/04/General-Order-7.pdf>.

### Non-transparent

KIUC criticizes the figure of 20 mgd diverted from Wai'ale'ale and Waikoko Streams as "not accurate," but Earthjustice obtained those figures directly from the IFSAR, which reports flow records of the U.S. Geological Survey ("USGS"), past water use declarations, and the Commission's own estimates and measurements. *See* IFSAR at 30, 53, 76-78, 82. Instead of faulting others for citing the publicly available data, KIUC should instead focus its attention and criticism on its own lack of proper monitoring and reporting to the Commission, which is its basic obligation as a major diverter of public trust resources.

### Insignificant

KIUC also protests the comparison to rooftop solar, which Earthjustice offered for general perspective on how much energy the Waiahi plants actually produce from each mgd of streamflows that KIUC diverts. By any measure, 37 kW (or if KIUC prefers, 50 kW based on its claimed figure of around 15 mgd of total diversions) is a small amount of energy, certainly from a utility perspective, and particularly in relation to the million gallons of water per day used to generate it.

KIUC takes issue with the information about the utility-scale solar-plus-battery plants, which, again, Earthjustice obtained directly from KIUC's own public relations piece.<sup>6</sup> KIUC quibbles that the Waiahi plants' output is around 7%, instead of 2%, of the output of the solar-plus-battery plants, although it does not provide the figures for that actual output in either its press release or letter. In any event, Earthjustice's point remains the same: the Waiahi plants amount to a small fraction of these modern solar plants in energy production, while imposing infinitely more water use impacts. This relatively insignificant power output does not justify the harms to treasured water resources.

### Inefficient

Similarly, KIUC attempts to distinguish its planned Waimea hydro facility, insisting that the direct, in-line hydro portion of that project is "only" 6.4 times more efficient than the Waiahi plants, while the rest of the productivity and efficiencies of the Waimea project stem from its solar and pumped storage features. This proves our point, that the Waimea project holistically

---

<sup>6</sup> KIUC insists "only one plant is currently open"; to clarify, its press release declares that the second project "broke ground" and is "[s]cheduled to be operational by the end of this year." Press Release, PUC Approval Helps KIUC Close In On Renewable Goals (June 22, 2018), <http://website.kiuc.coop/sites/kiuc/files/PDF/pr/pr2018-0622-PUC%20approves%20KIUC%20PMRF%20project%20REV1.pdf>.

demonstrates how KIUC can and should move toward modernizing its hydro practices to maximize water use efficiencies and mitigate the environmental and cultural impacts of its diversions.

KIUC's claims that the Waiahi plants are "highly efficient" and include a recently replaced turbine likewise miss our point, that "KIUC should not expect to simply install new turbines at the end of century-old plantation ditches, nor should it be allowed to lock in legacy diversions, and all their environmental and cultural harms, for another century." Earthjustice Comments at 7-8. We firmly stand by this position.

#### Conclusion

Finally, we note KIUC does not, and indeed cannot, dispute the sacred cultural importance of the streamflows it diverts, as Earthjustice explains in its comments. Yet KIUC appears willing to add insults to the injuries of its historical and ongoing diversions. KIUC would not be the first diverter Earthjustice has encountered that prioritizes control of "free" or "cheap" public water over respect for public trust resources. As always, we stand ready to ensure that this diverter is accountable to the public trust principles and values established as the law of this land.

Mahalo again for the opportunity to submit comments and this reply. We welcome any questions and more information and transparency from KIUC and the Commission.

Respectfully submitted,

/s/ Isaac H. Moriwake

V. Lu'ukia Nakanelua

Leinā'ala L. Ley

Isaac H. Moriwake

EARTHJUSTICE

cc (via electronic mail):  
Kaua'i Island Utility Cooperative  
Office of Hawaiian Affairs

**68) County of Kaua'i, Department of Public Works, Lyle Tabata, July 13, 2018**

**Bernard P. Carvalho Jr.**  
Mayor



**Lyle Tabata**  
Acting County Engineer

**Wallace G. Rezentes Jr.**  
Managing Director

**DEPARTMENT OF PUBLIC WORKS**

**County of Kaua'i, State of Hawai'i**

4444 Rice Street, Suite 275, Līhu'e, Hawai'i 96766  
TEL (808) 241-4992 FAX (808) 241-6604

RECEIVED  
COMMISSION ON WATER  
RESOURCE MANAGEMENT  
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July 12, 2018

Ms. Suzanne D. Case, Chairperson  
Commission on Water Resources Management  
Kalanimoku Building  
1151 Punchbowl St., Room 227  
Honolulu, Hawai'i 96813

Re: Instream Flow Standard Assessment Report & Interim Inflow Stream Standards for  
the Hydrologic Unit of Wailua

Aloha Chair Case and Commission Members:

I am writing to comment on establishing an Interim Inflow Stream Standard (IIFS) for the Wailua System which originates at the Blue Hole Diversion at the foot of Mount Waialeale. If I may summarize my knowledge of the system as the last Manager of Amfac Sugar Kaua'i, the water feeds into what originally was the Līhu'e Plantation Company Limited's irrigation system.

The waters initially were collected at diversions at what was called the North Fork Wailua and then flowed through two hydro-electric plants. Some returns to the stream and then at the irrigation intake on to irrigate thousands of acres of sugar lands. These waters were the prime recharge source of the Līhu'e potable ground water system via the furrow irrigation of the Līhu'e sugar cane growing lands. At the advent of the change of irrigation technique to the more efficient drip irrigation system in the 1980's coupled with further urbanization of the Līhu'e district of Kaua'i there was a notable drop of potable water source due to overdraw and minimal recharge from irrigation. The Līhu'e Plantation Company Ltd. ceased agricultural sugar operations in November of 2000 and officially closed in December 2002. During that period the hydro-electric plants were still operating and ownership transferred to Kaua'i Island Utility Cooperative (KIUC) and the land previously owned by AMFAC sold to Grove Farm Company.

Today KIUC still operates the hydro-electric plant which still produces 1.5 megawatts of power and the Grove Farm company has designed, constructed and operates a surface water treatment facility to supply the Līhu'e district with its potable water needs. Without this facility Līhu'e would be without a sustainable potable water source.

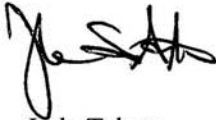
I am asking you and the commissioners to take a close look at establishing an adequate IIFS with respect to meeting the needs of KIUC, the Kaua'i Department of Water and our community. At

*An Equal Opportunity Employer*

Commission of Water Sources Management  
Instream Flow Standard Assessment Report & IIFS for the  
Hydrologic Unit of Wailua  
July 12, 2018  
Page 2

this point we do not see any concrete numbers from which to draw comment so will simply ask you Chair Case and the commissioners to keep the process moving forward with the most expeditious process you may employ.

• Mahalo,

A handwritten signature in black ink, appearing to read 'Lyle Tabata', with a stylized, cursive script.

Lyle Tabata  
Acting County Engineer