

MINUTES
FOR THE MEETING OF THE
COMMISSION ON WATER RESOURCE MANAGEMENT

DATE: April 20, 2021
TIME: 9:00 am
PLACE: Online via Zoom
Meeting ID: 948 9428 8224

Chairperson Suzanne D. Case called the meeting of the Commission on Water Resource Management to order at 9:02 a.m. and stated it's being held remotely and being live streamed via YouTube for public viewing due to the ongoing Covid-19 pandemic; noted the meeting was set to take live oral testimony and any written testimony would be acknowledged when the submittal items come up. Chairperson Case read the standard contested case statement.

MEMBERS: Chairperson Suzanne Case, Dr. Kamana Beamer, Mr. Michael Buck, Mr. Neil Hannahs, Mr. Wayne Katayama, Mr. Keith Kawaoka, Mr. Paul Meyer

COUNSEL: Mr. Colin Lau

STAFF: Deputy M. Kaleo Manuel, Mr. Dean Uyeno, Mr. Roy Hardy, Dr. Ayron Strauch, Mr. Neal Fujii, Ms. Rae Ann Hyatt

OTHERS: Mr. Rainer Bock, Dr. Delwyn Oki (U.S. Geological Survey), Mr. Dean Minakami (Hawaii Housing Finance & Development Corp. <HHFDC>), Mr. John Broward (Kaloko-Honokōhau National Historic Park Service <KAHO-NHPS>), Mr. Steve Rice (KAHO); Mr. Peter Fahmy (KAHO), Mr. Neal Desai (National Parks Conservation Assn. <NPCA>), Mr. Gregory Barbour (Natural Energy Laboratory of Hawaii Authority <NELHA>), Mr. Alexander Leonard (NELHA), Ms. Leimana DaMate (Aha Moku), Ms. Ruth Loke Aloua (Hui Ola Ka Wai); Ms. Kim Crawford Salinas (Hui Ola Ka Wai), Ms. Ashley Obrey (Native Hawaiian Legal Corp. <NHLC>); Mr. Bruce Tsuchida (Townscape); Dr. Jonathan Likeke Scheuer, Ms. Eva Blumenstein (Maui Dept. of Water Supply <MDWS>); Ms. Alexa Deike (UH Law), Ms. U'ilani Tanigawa Lum (behalf of Wai'oli Valley Taro Hui <WVTH>), Mr. Kevin Fernandez (UH Law), Dr. Kapua Sproat (Ka Huli Ao); Mr. Reid Yoshida (WVTH); Mr. Devin Forest; Mr. Gil Keith-Agran (Counsel for Maui Land & Pineapple); Mr. Paul Subrata (Maui Land & Pineapple <MLP>)

All copies of written testimonies submitted will be included at the end of the minutes and is filed in the Commission office and are available for review by interested parties.

Chairperson Case notified the public that Item C-1 will be heard before Item B-2

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A. APPROVAL OF MINUTES

March 16, 2021

PUBLIC TESTIMONY – None

**MOTION: (HANNAHS/BEAMER)
To approve the minutes as submitted.
UNANIMOUSLY APPROVED**

042021 00:03:26

B. ACTION ITEMS

- 1. Approve the Payment Plan Proposed by Rainer Werner Bock, Trustee, for Fines Imposed on November 17, 2020 under Item B-4 in Conjunction with Issued After-the-Fact Stream Channel Alteration Permit (SCAP.5422.6), East Kuiaha Stream, Ha‘ikū, Maui, TMK (2) 2-7-012 :254**

Commissioner Meyer announced recusal from Item B-1.

PRESENTATION GIVEN BY: Mr. Dean Uyeno, CWRM Stream Protection & Management Branch

Mr. Uyeno stated the summary of request and briefed on parts of the background information and noted the footnote on the bottom of page 4 of the submittal. The payment plan was also noted (upon page 5 of the submittal) and also noted upon the staff’s recommendation. Recommendation #2 was highlighted with the SCAP expiration noted.

QUESTIONS

Commissioner Buck – asked regarding the decoupling of the fine and noted the remediation (to him) is more important than paying the fine as the payment schedule seems like it would delay any remediation work.

Mr. Uyeno – answered as much as possible for the permittee to proceed on both and understand that there are property damages due resulting from the recent flooding at Ha‘ikū in the past month. There may be additional work needed and to talk to him about it. As much as he can proceed with the existing permit conditions, he may proceed with that at anytime and does have 2-years to complete the project.

Commissioner Buck – what are the ramifications if he does not do the remediation or stick to the schedule?

Mr. Uyeno – a lot depends on his current status of funding and could come in for a permit extension after the 2-years at which time we could bring it back to the Commission.

Commissioner Buck – noted the remediation versus the fine; and stated fixing the problem is critical-how are we ensuring that the remediation happens? If we levy the fine and accept payment plan – where do we go if the remediation never starts?

Mr. Rainer Bock asked to provide comment at this point. Chairperson Case allowed Mr. Bock to rebuttal.

Mr. Bock – First of all, the remediation will start; I have all intent to get the remediation done. It is not that I'm trying to withdraw from the remediation. I said from the beginning I would do that and will comply with the Commission-so the question should not come up because I will do it.

What happened recently when Mayor Victorino declared an emergency, we had a dam breach on Kapakalua Road and tremendous amount of water coming down East Kuiaha Stream which damaged a lot of properties. I've sent a clear explanation in a letter which explained what happened in 2016 till now. (*read part of April 19, 2021 letter to CWRM*). In 2016 we had no idea of the weather situation or understand about climate change. When Audrey made a complaint with you, you directed in a way that I caused this brown water; so I made it clear that when I did any work, in which I apologized for doing it without permits – there was not a drop of water in the stream.

When the 'Iao flood happened in 2016, it was the first time we got hit by a flood. Subsequently every two years we've had a huge flood. In 2018 was the second flood and 2021 was an outrageous flood. I've sent photos to the Commission showing the damage caused and sent a letter on April 19th explaining in detail what happened. In 2016 when this whole thing started, I complied with what the Commission asked me to do from day one; I never refused anything and always complied. Having said this, my lawyer, Mr. Mancini was not present at the time when I received the first communication in which he requested from the Water Commission to get an extension which was received; still I was fined \$39,000 on the grounds of delay to file for a permit. I don't find this morally and ethically right.

I've gone out of my way to show that I'm willing to do whatever right what happened in a wrong way. I'm very apologetic and I really would try my best to fix whatever can be fixed.

Commissioner Buck – thank you Mr. Bock; my question is because my responsibility as a Commissioner; I respect your situation, I have empathy and trying to do everything I can to maintain that the stream gets fixed. I'm glad to hear you would do the work; I'm just trying to manage it from our perspective as a Commissioner and I appreciate all of your testimony and everything you shared with us. The effects of climate change are serious, thank you.

Mr. Bock – understanding the fact the stream is double-width by now.

Chairperson Case reiterated to Mr. Bock that the Commission is only hearing the question of the payment plan and appreciated all his testimony.

Chair Case – do you have a problem with the payment plan as proposed?

Mr. Bock – yes, and when the fine happened, we were in a situation of Covid, that has not changed; and I'm supposed to pay a fine which I would definitely try to do if that's what needs

to do (*reiterated he feels the fine is not morally/ethically correct*) but would pay the plan as proposed.

Commissioner Katayama – (to Dean) referred to recommendation #2 date of April 30, 2021 the correct date? And is it just a one-time report?

Mr. Uyeno – yes, we’d like to see the status of the remediation plan by that date; at this time (it is a one-time report).

Commissioner Katayama – is it possible to require additional updates or change in the progress timeline?

Mr. Uyeno – we can certainly add a condition if you’d like to see another report.

Commissioner Katayama – what you’re comfortable with managing the situation to ensure the concerns of the Commissioners are addressed before we get too delinquent on the matter.

Mr. Uyeno – we could ask for a status again in April 2022; will make 1-year out.

Chair Case – what we’re hearing Dean is the Commissioners want you to keep an eye on it and comeback to us if there’s a problem.

Mr. Uyeno – the only thing I would add is if you could amend the recommendation to add on that date, that way we can provide the notice of Commission action that date would be included as well.

Commissioner Buck – I move to approve Item B-1 with the added condition of an update report on August 30, 2022.

Chairperson Case asked for a second.

Mr. Uyeno clarified the update to be April 30, 2022

MOTION: (BUCK/KATAYAMA)

To approve B-1 as amended

APPROVED: CASE/BEAMER/BUCK/HANNAHS/KATAYAMA/KAWAOKA

Commissioner Meyer Recused.

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C. INFORMATIONAL BRIEFING

- 1. U.S. Geological Survey – Numerical simulation of the effects of groundwater withdrawal and injection of high-salinity water on salinity and groundwater discharge, Kaloko-Honokōhau National Historical Park, Hawai‘i**

PRESENTATION GIVEN BY: Dr. Delwyn Oki, U.S. Geological Survey

Dr. Oki thanked Commissioners for the opportunity to present the results of their recent study that was just published.

Dr. Oki gave a slide show presentation and presented the study and research findings of Kaloko-Honokōhau National Historical Park (KAHO). It is within the Keauhou Aquifer System (KAS) as defined by the State and in the coastal part of the groundwater system. Maps of the wells in the general area and explanations of the key information provided regarding the water-levels in the well system.

The conceptual modes of groundwater occurrence were shown and explained. Discovered recently within the last decade, as you go deeper down the coastal freshwater lens system, there's a deeper confined groundwater system that contains freshwater. The vertical salinity distribution scale relative to the well (drilling) depth was also shown and explained using the data received from the Kamakana well (Tom Nance Water Resource Engineering). This well was instrumental in helping to understand conceptually what's going in within the groundwater system; there's three (3) different modes in the Keauhou area.

The main reason why the park was concerned about development in the inland area was that the park supports a number of ecosystems that are dependent on groundwater like fishponds that are culturally important and serves as habitat for native endangered waterbirds, also anchialine pools that support native habitat as well.

The study objectives were stated with the 3-D model shown and explained regarding the selected scenarios of groundwater withdrawal from and injection of high-salinity water to the coastal-freshwater lens system. The simulated discharge reduction withdrawal scenarios were explained and shown (mapped). Noted that the representations of the contours are scenarios and it's unlikely there would be any withdrawals within the boundaries within the park itself. Also, the contours would benefit from a greater number of withdrawal sites simulated in the model and don't factor in some important features that affect the shape of the contours.

The same scenarios were given for simulated salinity increase at anchialine pools caused by 0.5 and 1.0 mgd withdrawal of wells nearby.

The summary and conclusions of the study were highlighted and explained and noted the conceptual understanding of groundwater occurrence in the Keauhou Aquifer System in general is not 100% certainty but can improve as more information become available.

QUESTIONS

Commissioner Beamer – if you were to age the date these wells were drilled (between the inland and coastal wells) am I right in assuming the (turquoise) inland wells are drilled more recently and the (purple) coastal wells are older?

Dr. Oki – the first wells drilled in the inland of the dash line (turquoise) area were drilled about 1990-91; all the inland wells were drilled since 1990. The coastal wells have been drilled at various times from 1990's-recent.

Commissioner Buck – the relationship between the coastal freshwater and the confined, are they two separate flows or what’s the current knowledge of their interaction?

Dr. Oki – based on information we have from geochemistry (water isotopes), the systems have some degree of hydrologic connection; water isotopes collected in the coastal freshwater lens system do indicate a component of water originating from the inland area. The inland area of high-water levels probably connected to the coastal confined groundwater system. Because nothing is totally impermeable, it’s likely the coastal confined groundwater discharges upward into the freshwater lens. From my perspective, there’s some interconnection amongst the three types of groundwater occurrence.

Commissioner Beamer – what’s the depth of that freshwater?

Dr. Oki – roughly 10-meters – at this site.

Commissioner Hannahs – do I understand correctly, we have no active wells drawing this confined source?

Dr. Oki – correct; there are only a few wells that penetrated into that zone; this Kamakana Well and the well drilled by CWRM at Keopu – the wells were for monitoring purposes.

Commissioner Hannahs – would there be a risk of collapse of that system as you vacate the water beneath it?

Dr. Oki – it’s possible you’d induce some saltwater into that system; for example, if you start pumping from the coastal confined -1) saltwater could be introduced; 2) because you’ll reduce the pressure within the coastal confined, you’ll get a little less discharge from that system into the upward and downward.

Commissioner Hannahs – referenced the recent East Maui report and asked is this water discharging important to the nearshore marine life?

Dr. Oki – certainly, the discharge from the coastal system has some importance in terms of supporting the groundwater dependent ecosystems (GDE); the deeper water I can’t speak to that.

Commissioner Buck – if we do pump the coastal confined groundwater, it would have an impact by lessening the coastal freshwater lens system?

Dr. Oki – it’s possible; if you start withdrawing water from the coastal confined system, you’ll get some salt intrusion from the ocean, and reduce the discharge (as explained earlier).

Commissioner Hannahs – commented on the term “KAHO” (referring to Kaloko-Honokōhau National Park) regarding it may not be received well within the Hawaiian community.

Dr. Oki – replied the National Parks has given it the four-letter acronym and has acronym’s for each park.

Commissioner Hannahs – commented “KHNP” would be better.

Commissioner Katayama – what is the next steps in terms of getting more information?

Dr. Oki – collecting more info by drilling more exploratory wells; I know the State had plans for a deep monitor well inland of the Park and more information will help our conceptual understanding. Looking more at GDE and understanding the hydrologic effects of humans but also the ecological effects of humans on the ecosystem is important as well.

Commissioner Katayama – thanked Dr. Oki for a thorough presentation and though slides #3, 4 & 5 were very helpful in giving a 3D view; but thought that the locations of the wells in each scenario would be as helpful too; and asked in regards to the increase in salinity to the National Park-at what point is there a caution line we need to be sensitive to protect the habitat?

Dr. Oki – it's going to be dependent on species of concern and its life-stage; but am not an expert in that area.

Commissioner Katayama – commented on the coastal confined groundwater regarding going from pure saltwater to freshwater in a matter of 30-feet or 10-meters; asked if it's "cap" or due to pressure?

Dr. Oki – if you drill into that confined system and don't do anything about it, the water will essentially leak out. If you seal it off and complete a well within that confined system you can potentially withdraw freshwater from it, but don't know how much you'll able to sustainably withdraw and dependent on a number of factors and current unknowns that an exploratory well will help resolve.

Commissioner Beamer – noted on the complex history of this area and how much information gathered overtime and learned about the importance of the submarine ground discharge ecosystems; also noted upon the wells mauka and the impacts upon the park regarding scientific debate and discussion and want to thanked Dr. Oki for his (studies) work that was needed for decision past making. Also commented on the Park's position in now maintaining status quo in maintaining its ecosystems and connectivity.

Commissioner Buck – thanked Dr. Oki and noted the contour model scenario and if more information can be achieved other than putting in more exploratory wells.

Dr. Oki – we tried to match what we did know about the system and does a reasonable job in matching the distribution of water levels in changing from makai to mauka; it generally matched the salinity in some of the areas, both map and vertical view. With the limited information we had, the model generally represented those conditions and sometimes drilling a new well also changes everything and find that we were wrong in our assumptions or conceptual understanding. Drilling more wells is the one sure fire way of helping us improve our understanding.

Chair Case – in terms of your first schematic, is it fair to say the high-level aquifer is feeding both the shallow and deep one along the coastline? The water is coming from the center of the island being held in a high-level aquifer and feeding out.

Dr. Oki – based on our current understanding, hydrological and geochemical, it appears water from the high-level system is feeding directly/indirectly both the coastal freshwater lens and the

coastal confined groundwater system. That water in the inland area has to discharge somewhere and is discharging into the ocean either through any of those systems.

RECESS: 10:08 AM

RECONVENE: 10:16 AM

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B. ACTION ITEMS (CONT'D)

2. Natural Energy Laboratory of Hawaii Authority and Hawaii Housing Finance and Development Corporation APPLICATION FOR A WELL CONSTRUCTION PERMIT Ota Well (Well No. 8-3957-006), TMK (3) 7-5-001:165, Lanihau 1-2, Moeauo Ahupua'a, Keauhou, Hawai'i

PRESENTATION GIVEN BY: Mr. Kaleo Manuel, Deputy, CWRM

Deputy Manuel summarized the staff submittal and shared maps of the designated subject area. Proposing the Commission approve the Well Construction Permit for the Ota Well with special conditions that aim to collect more data and information in the next 2 years, that would be used to develop mitigation measures to protect traditional and customary practices that may be attached to the pump installation permit when it comes to the commission for future decision making.

The well owners are identified as NELHA and HHFDC, the landowners are HFT Ka Makana LLC, and the drillers and applicant for the permit are Water Resources International Inc. If the well is developed successfully and productive, NELHA and HHFDC plan to dedicate the well to the Hawai'i Department of Water Supply (HDWS) for integration into its system.

Deputy Manuel provided background information on the well project. The water from this well will be used to support NELHA's Technology Park and by assisting the low-income housing projects at HHFDC's Ka Makana Village and additional water available from the system will also supplement HDWS. Exhibits 2-6 shows the various comments received by inter-agency departments/divisions; and based on those comments, NELHA requested (5) extensions to address those in which is summarized in the submittal.

The well proposes to use less than 672,000 gpd with the current pumpage from the Keauhou Aquifer System with the total KAS area reporting at 12 mgd with the SY at 38 mgd. The (8) proposed conditions/actions that's considered with respect to the subject well, were explained and the map area was shown and briefed on of the surrounding observatory and production wells in radius within the (4) ahupua'a areas. If authorized planned use reaches 80% of sustainable yield, we shall commence with public informational meetings. The current 12-month average is 13mgd or 34% of SY.

With the draft KWUDP the Commission has seen, it does look at shifting well sources south of the QLT Well. Deputy Manuel briefed on the wells in the Keauhou Aquifer System and surrounding areas. The Ota Well is south of the QLT Well and is consistent with shifting southward and its policy. CWRM is awaiting the KWUDP to be approved and come back to the

Commission for final adoption. Deputy Manuel also touched based on (USGS) Dr. Oki's presentation in relation to the Ota Well and B-2 submittal. Inter-agency comments (in Exhibit 12) and agency written testimonies were received by Dept. of Hawaiian Home Lands (DHHL), The National Park Service (NPS), The Hawai'i Dept. of Water Supply (HDWS), Natural Energy Laboratory of Hawai'i, (NELHA), Aha Moku, Hawai'i Housing Finance and Development Corporation (HHFDC), and other individuals.

This well does meet the well construction and pump installation standards approved by the Commission. This project has gone through Chapter 343 compliance and gone through the Ka Pa'akai analysis. No streams will be affected by this project however the connection between high level and basal aquifer areas are still not clear as we learned from Symposium 1 and the limitations of the numerical model of the groundwater dependent ecosystem impacts. GDE Symposium 2 we hope to clarify and determine the extent of traditional and customary practices and then come up with mitigative measures to help protect impacting those.

If future water use reporting data shows water levels declining, chlorides increasing or impacts to traditional and customary practices, designation as a water management area is also a feasible option. What's before the Commission is a well construction permit for the Ota Well and not the pump installation permit. There are recommended special conditions working with staff and the parties that help guide and develop mitigation measures, which could also be attached to the pump installation permit when it comes before the Commission. The recommendations and special conditions were then stated.

[Deputy Manuel noted a correction to the Keopu deep monitor well number; amended recommendations and added special condition #6 – for the permit be subject to State Historic Preservation (SHPD) archaeological monitoring plan procedures]

QUESTIONS

Commissioner Beamer – asked on authorized planned use but example provided in presentation is present usage

Deputy Manuel – right now one of the challenges is the draft Keauhou Water Use and Development Plan that hasn't been approved by the County. The current authorized planned use I would need clarification from the Planning Branch if it reached 80% SY. At this time, there hasn't been any change from authorized planned use related to actions taken from this Commission since 2017; and will follow-up with staff on that; but yes, you're correct, the focus is on current usage.

Commissioner Hannahs – thanked Kaleo and the team's work for this presentation and referred to Commissioner Beamer's point on planned use (page 5) and special condition #6. Asked if the current usage has been significantly reduced due to the pandemic?

Deputy Manuel – deferred to Roy for answer.

Mr. Roy Hardy, CWRM Ground Water Branch Chief – noting nothing significant and referenced that HDWS whom is the major user may have a better answer.

Commissioner Hannahs – asked on Keahuolu QLT well in reference to noting what the significant (planned use) needs are for the general area noting the sustainable yield (SY).

Deputy Manuel – will need to check if they received authorized planned use entitlements and whether it's been calculated against authorized planned use (asked Roy if he knew the calculations on the current water production on QLT well)

Chair Case – asked for a reminder on the difference between the SY measurements and the public trust impact on ecosystem resources as recalling it being two different concepts.

Deputy Manuel – answered the SY has been developed from the RAM model that considers recharge and percent of recharge; what's highlighted in the Water Resource Protection Plan (WRPP) is that SY wasn't calculated to look at protecting traditional and customary practices or GDE. While we have the SY that accounts for a little over 50% of water to remain in the aquifer, the logic is it would flow and discharge into the coast. As Dr. Oki highlighted, it's a complicated situation in this specific region; and our assumption that the 50% is sufficient to protect GDE, could benefit from additional data and information.

Commissioner Meyer – (to Roy) asked with the current production, when do you see a negative impact of productivity on neighboring wells in the area as it doesn't make sense as a conditional permit based upon current status and situation.

Mr. Hardy – for this well, if it behaves like the other wells in the high-level there should be some production and some good high-quality water with steady chlorides, which is typical of high-level water. One thing about high-level sources it's sensitive to water level changes and every well behaves differently. We're hoping this pump test would give us an idea to make that predictive impact. You also have the model although this well is outside the boundaries of the model.

Referred back to Commissioner Hannahs question for QLT well, there was a "COVID" effect in that production significantly decreased, but HDWS could better answer on the "why".

Commissioner Hannahs – asked if they are entitled for their future water development?

Mr. Hardy – referred answer to Hawai'i Department of Water Supply (HDWS).

Commissioner Beamer – noting the importance as it specifically states in CWRM's conditions "authorized planned use" but there's no reporting on that – not only for this submittal but for future, to make sure we're paying attention to that.

PUBLIC TESTIMONY

Chairperson Case reminded the public to limit their testimony to not more than (3) minutes

Mr. Dean Minakami, Development Branch Chief, HHFDC – Good Morning Chair Case and Commission members. We stand on our written testimony supporting Ota Well and the staff's recommendations and wish to extend our appreciation to Deputy Manuel and staff for bringing the parties together to address the concerns relating to Ota Well's development and will be available to answer any questions you may have, thank you.

QUESTIONS

Commissioner Buck – asked on the funding source and dollar amount coming from HHFDC?

Mr. Minakami – replied HHFDC and NELHA have a cost sharing agreement for the well with each also receiving a pro-rated share of the water that's authorized from the well. We'll be using our revolving funds to pay for our share.

PUBLIC TESTIMONY (CONT'D)

Mr. John Broward, Superintendent, Kaloko-Honokōhau & Pu'uhonua o Hōnaunau NHPS – Aloha Chair Case and members of the Commission. Mahalo for this opportunity to provide the comments of Kaloko-Honokōhau National Historic Park to you today. We're grateful to Chair Case, Deputy Director Manuel and other interested parties for the discussions related to Ota Well. Because we received the staff submittal on April 15th, our review has been limited. For the record, we disagree with some of the analysis of the 3 proposed conditions Kaloko-Honokōhau requested of the attached well construction and pump installation permits. We also have comments on the proposed recommended action #1 on page 15 of the submittal. Our comment is taken from our March 23, 2021 letter which is part of Exhibit-3. As stated, the NPS maintains the proposed NPS special conditions should be enforceable in terms of the well construction and pump installation permits for the Ota Well. If the CWRM does not include NPS special conditions, CWRM shall hold a hearing as required under HRS 174-C-9 & HRS 91-9, to determine if the PIP and well certificate should be issued; if so, under what conditions.

Based on the NPS letter and staff submittal we do not wish to ask for a contested case hearing for the well permit; however, we would like to reserve the right to a contested case hearing related to approval of the pump installation permit and well certificate. We believe that can be done if the recommended conditions of 1.b has an additional first sentence added to read: "...the Commission Chair, Deputy or staff shall not administratively approved the pump installation permits for the Ota Well but shall consider approval of the permit with special conditions only at a regular meeting of the Commission". We believe that may be the intent of the condition but here we're seeking clear language in that regard of assurance for us.

Again, we're grateful to Chair Case, Deputy Director Manuel and all interested parties for having to participate in discussions related to this agenda item. We appreciate the spirit of cooperation in everyone's consideration of our position. Protecting the water dependent ecosystems in the Park is a public trust we take very seriously. Therefore, we'll continue to collaborate with interested parties. In the meantime, we have members of our staff here today to answer any technical questions related to the freshwater needs of the Parks ecosystem (named staff and titles); Mahalo for your consideration.

Chair Case – addressed the contested case discussion in hearing that it was not a request, therefore, the subject matter will commence to be heard. We're separating the drilling of the well from authorization of pumpage and use; and you want assurances that the latter part of this would comeback to the Commission; I can say that is our intention. Based on that, we'll continue with this discussion.

Chairperson Case called upon the other members of the National Parks Service for further comment, none received.

PUBLIC TESTIMONY (CONT'D)

Mr. Neal Desai, Pacific Region, Sr. Program Director, National Parks Conservation Association
Good morning Chair Case and members of the Commission. We were formed in 1919 as an independent advocacy organization for National Parks and public lands, separate from the federal government. We testified in support of the NPS petition, highlighted the strong scientific evidence showing we have a major problem on our hands right now with the water quality and quantity that is threatening the traditional and customary practices the Commission is required to protect. We're more concerned today, than we were years ago. Our members throughout the island-state and country strongly support the specific mission at Kaloko-Honokōhau to protect T&C. When the Commission denied the petition, it wrote that well applications will comeback to the Commission for decision making if there's a disagreement on special conditions; there's a strong disagreement for this specific matter. Staff bifurcated the application as we've been discussing from separating the construction and pumping, reasons concern for us.

Like the prior speaker, we do not see anything in writing, including special condition 1.b., that makes clear the pumping permit will absolutely comeback to the Commission for decision making. I appreciate the intention of the Chair that intends it will comeback but would like to see this in writing so we're not basing our decision making in the future on intentions of individuals that may or may not be around on this Commission. We hope it's a simple fix and ask the Commission to affirm that commitment and its intention with a written statement specifying that.

I also request a procedural clarification from Chair Case on how the Commission will check today at this meeting with participants if they wish to verbally request a contested case hearing depending on what the decision is. To be clear, I'm not requesting anything right now but wanted to know how will members weigh in if they'd like to following the decision but prior to the close of the hearing.

We also have significant concerns with the staff analysis. For example, we know it can take years to decades for the impacts of groundwater pumping to impact coastal resources, the report states a 96-hour monitoring test is able to monitor the impact of the basal lens, which doesn't make sense.

Lastly, let's admit what we're doing here is commercial development and have an honest discussion about that. When we were looking at this, we were happy to see the staff conceded that the water "originally" to be shared between NELHA and low-income housing. From what we've gathered, the record now shows at most 1/4 will go to affordable housing which the developers allow to be 140% median income.

I'd like to thank you for this opportunity to testify to hear from all of you and others and to reiterate our request and your consideration of that to put a simple statement in writing this would be coming back; thank you very much.

Chairperson Case noted the announcement at the beginning of the meeting regarding the request for a contested case hearing procedures and reiterated the statement.

Commissioner Beamer asked on the question if participants get kicked-off of Zoom, are they able to get back on? Chair Case replied participants would just need to log back on.

PUBLIC TESTIMONY (CONT'D)

Mr. Gregory Barbour (Applicant), NELHA – Thank you Chair Case and members of the Commission. We strongly support the staff recommendation for us to move ahead with the exploratory well. At this time, we've been working on this project over six years. We've been very patient and tried to do everything proper in requirements for the rules and regulations.

Lastly, I want to thank the Commission staff, Kaleo for getting everybody together to talk story, and hopefully we can create some good clean, green renewable energy and technology jobs and affordable housing; thank you.

Mr. Barbour introduced Dr. Alexander Leonard, Chief Projects Officer for NELHA. Dr. Leonard stated he's in attendance to answer questions of Commissioners.

PUBLIC TESTIMONY (CONT'D)

Ms. Leimana DaMate, Aha Moku – Aloha Chair; thank you for the opportunity to give comments. Aha Moku stands on its written testimony as submitted. We support the CWRM's recommendations and standby to answer any questions if needed; thank you.

QUESTIONS

Commissioner Beamer – clarified on the written testimony read stating there would be adverse traditional and customary affects makai of this ahupua'a and some families had concerns with that.

Ms. DaMate – yes, they did. We met specifically with the generational families of Lanihau area with Roy Hardy on April 5th. It was basically not understanding what the impact of the Ka Makana Village would be on the withdrawal of Ota Well. According to staff's recommendations and studies, at least 50% of the aquifer would continue to be flushed out into the ocean, that will sustain the current practices. They were anxious to hold the symposium-2 because along with working with practitioners from Lanihau, they've also talked to many of the practitioners within Keauhou Aquifer and those concerns have also been bought up at the symposium where specific practices which were not related will be shared and willing to commit to it during the symposium-2.

Commissioner Beamer – in some ways it relates to the authorized planned use conversation; I respect your work and applaud the 'Aha Moku and working with community. Our community capacity is there but better networking with our traditional customary practitioners and experts on our resources; however, I'm struggling with the statement that their concerns weren't valid because they were misunderstood.

Ms. DaMate – their concerns are very valid, which is why Roy met with them to answer their technical questions. The practices still continue, specifically off of Lanihau that is based on the freshwater discharge that impacts the basal lens and where the fishing area is out there, those

have not been identified specifically publicly yet; with the fear that if it is, it would be blanketed and others would start impacting the resources there. Their concerns were mitigated when they realized the water from the higher monitor wells that sufficient water is still going out and in the near future where practices would not be impacted; and based on that, they support the conditions of the application.

Commissioner Beamer – Mahalo for your work, and I enjoyed the day we spent out at Kaloko together and seeing the resources.

PUBLIC TESTIMONY (CONT'D)

Ms. Ruth Loke Aloua, Hui Ola Ka Wai – We're a small group of community members who have interest in the groundwater resources and the life these waters provide our practices and feed our lifestyle. Before I move forward, Ashley Obrey of Native Hawaiian Legal Corp would also be speaking on behalf of our hui. Thank you to the Commission to accept my request to speak today and appreciate the mana'o being shared as I'm learning a lot but still have questions. Thank you also to USGS, Delwyn Oki for his presentation, which was essential. I remember going to Hawaii Department of Water Supply meetings and telling them the water runs from mountain to ocean and they told me no; it was just (2) years ago; and to see these changes in two years is really refreshing.

I'd like to state my interest in the water. I'm a kama'aina of Kona, my grandma's family comes from Kona and we're genealogically connected to these lands and district. I'm a lower-economic class kanaka just trying to make it. I don't have any benefit here and took off my work-day for these meetings and need to make up 4-hours. It's teary because my family comes from Kona, my grandfather's family has connection to this loko i'a as people who cared for it. A descendant of this Advisory Commission that helped to establish Kaloko-Honokohau National Historic Park. A lot of those kupuna have passed away and backed in the 1970's they stated to be maka'ala and "watch the water-it's rights". Back in the 70's they've seen this and predicted this region will be developed. So, what they did was for me, and what I'm doing today is not for me; it's for the next generation. My nephews will be impacted by whatever we decide here.

I'm a practitioner (I don't like that term, but it's what westerners gave to categorize us) – I'm a kia'i loko and my kuleana is to make sure the loko i'a, i'a and limu has a voice in these discussions and honestly I don't feel our i'a have a voice or the loko. Traditional customary practices are rarely discussed, they're only mentioned at the end. I want to mahalo 'Aha Moku, Kaleo and others for reaching out but we're still not there and haven't done enough.

My takeaway is the timeline is unrealistic and it's just another attempt to facilitate development. I'm not saying don't take water, it's just unrealistic to say in 5-months we'll have these mitigated measures and all this can be done in two years. I think Delwyn's project is an informative study and probably took several years to conduct. My ultimate concern is this water for the next generation and to ensure the practices can still exist for family and hui members. I want to ask as Commissioners, this decision and the following decisions – going get water for my nephews to remain kia'i loko? Is that possible? Is it known? There's a lot of stretching the truth in this space and want to know how much we actually know and what are we trying to advance and why?

I'm concerned on the groundwater dependent ecosystems and thankful for the monitoring wells and these suggestions as they give us a look at something we can't see and an understanding of geologic formations and how they're facilitating water movement under-ground. What we're missing from these discussions is how these withdrawals are affecting the groundwater dependent ecosystems.

[Ms. Aloua lost internet connection]

Chairperson Case called upon the next testifier.

PUBLIC TESTIMONY (CONT'D)

Ms. Kimberly Crawford Salina, Hui Ola Ka Wai – Aloha Chair and Commission. I'm 28 years old and born and raised in the Ahupua'a of Kalaoa. Today I'm testifying with the request the Commission deny the Ota Well construction permit, agenda item B-2. The premise is I'm greatly concerned for continued health and welfare around the groundwater dependent ecosystems and all of the Keauhou Aquifer including but not limited to Kaloko loko i'a.

In 2015, I was blessed to reconnect with Loke on the Mauna when me and my kāne were young parents and when we went to Kaloko we got to give our family a sense of consistency, motivation and something to connect with and create our own family with the hui and got to feel the reciprocal love from 'āina; because when you love 'āina, 'āina remembers to love itself and remembers to love you. If there's any damage that continues to happen to Kaloko, it directly affects myself and my 'ohana and our future generations.

At Kaloko, we've been working on the restoration of the entire fishpond by removing invasive species and the native seabed came back which opened up the springs. We're working on fish survey studies and rebuilding the rock walls inside the fishpond and was fortunate that Benson and Kendall to hold down the foundation of the loko. We've also been doing water quality studies which I personally have been doing and am very interested in. I've done a 30-day study and got to see the springs and some points in the fishpond that we're consistently studying daily but there's areas in the ki'apua (the nursery pond), that should be able to sustain the life of the pua'ama (mullet), 'awa (milkfish), āholehole as well as the damselflies and other native plants and animals. While doing the tests, I consistently saw salinity above the threshold for those to thrive and survive. The 'ama'ama really enjoy 13-17 parts per thousand; with salinity, zero (0) is completely freshwater and thirty-five (35) is salt water and while monitoring in those areas, we were getting numbers above the threshold like 19, 20, 23 and rarely getting any within those thresholds. That tells me we're already at the danger level and need to make smart decisions moving forward so we don't impact these environments anymore greatly than we've already have.

As Loke was saying, I will continue to do this work even if I know it's going to be a continued degrading system but don't want to set my kids up for failure and want to do all I can to make sure they have this life vessel to connect to when their older. I believe we're at a point of severe action that needs to be taken and any more continued wells without the checks and balances will continue to harm these resources; Mahalo Chair and Commission.

PUBLIC TESTIMONY (CONT'D)

Chairperson Case asked Ms. Aloua if she has further testimony.

Ms. Aloua – I just want to emphasize the understanding of the impacts to the groundwater dependent ecosystems and being able to quantify it collectively and note in the submittal it suggests Kohanaiki, Kaloko-Honokōhau and Kealakehe can be included in symposiums regarding Lanihau and Moeau which I'm supportive of but if that language can be rephrased to say "will be included" because in Delwyn's study it shows the bandwidth of impacts of withdrawing water resources uphill can vary along the coastal resources. The need to have a regional approach to our water planning present and future is going to help shape water for future generations; thank you.

PUBLIC TESTIMONY (CONT'D)

Ms. Ashley Obrey, Native Hawaiian Legal Corp. – Mahalo Chair and Commissioners; Aloha kākou. I'm a staff attorney representing Hui Ola Ka Wai and a resident of Holualoa, Kona. We're here today to ensure proper decision making and think approving the permit today without identifying all native Hawaiian traditional and customary practices that might be affected without acknowledging the potential impacts on other public trust resources, without assuring proper planning for our aquifer and community is ultimately putting the resource at risk, and are opposed to approval of the permit today.

First, there's concerns about the bifurcation of these permits whether or not legally permissible. The practical effect of approving this well construction permit in the absence of affirmatively reviewing impacts from the pump installation permit necessarily means there's key information not before you. As we know the Water Commission is charged in considering, protecting, advancing public rights and resource at every stage of this planning process so if we treat this current permit as ministerial and separate from the pump installation permit, we're creating a vested right. Meaning, after millions of dollars are spent developing this well, the PIP comes back for decision making the odds of consideration of the impacts, go down; and saying "no" to NELHA and HHFDC is not a reality, and as the Commission, don't want to be put in that situation. Right now is an opportunity to address these concerns before money is committed and opportunities are foreclosed.

A few points I'd like to make is 1) the Ka Pa'akai burden is not met. <stated the Ka Pa'akai vs. Land Use Commission points of Article 12(7) of our Constitution "...to preserve and protect traditional and customary practices..."> There has been no independent analysis by the quorum here of T&C on and around the coast although the Commission has been tasked with reaching out to 'Aha Moku and getting their recommendations to protect T&C that in itself does not fulfill its kuleana to independently investigate. This failure to address the first step of Ka Pa'akai is highlighted by the suggested mitigation of symposium-2 which focuses on gathering information of impacts to T&C; which clearly have not been identified and can't postpone this critical step. Even if we could move forward with 'Aha Moku findings, they themselves note there are practices along the shoreline yet to be identified. Also, Hui Ola Ka Wai's members were not consulted even though members have been testifying on water issues in this aquifer for years. Loke was only brought in a few weeks ago to sit on a presentation talking about conditions and mitigation which have already been formulated.

The potential for impacts on the shoreline are being overshadowed by assumptions. I read the submittal and it seems there's different conceptual models in different places prioritizing

pumping over protection. Some looked at water as a single basal aquifer and pumping and recharge is evenly distributed and elsewhere I see an assertion that the aquifer is separate compartments with limited or no connectivity and have different statements whether the ahupua'a boundaries mean anything in terms of connectivity. Despite these assumptions and assertions, we know there's evidence there could be impacts to the shoreline. Dr. Oki today stated there's a degree of inter-connection amongst the three type of groundwater occurrences and the need to improve the understanding of hydrology and effects of groundwater dependent ecosystems.

This possibility is enough under the precautionary principle; pursuant to this principle the Hawaii Supreme Court rejected that scientific certainty is a necessity because of the idea of not wanting to be reactive but proactive and preventative. It's not enough to say the evidence is unclear so we can move forward today. I also think it's troubling we're discussing to move to mitigation without clearly acknowledging or identifying potential impacts and another thing to consider before making any decision is that the current version of the Water Use and Development Plan which is cited by the submittal has not yet been approved by the County Council. When this version came before the Council in 2017, they asked for DWS to go back and talk to the community and look at traditional practices which has not been done and the plan has not been updated; but it's being cited (in the submittal) to allow for pumping here.

Ultimately, a decision on Ota Well sets the tone for future groundwater management here in North Kona and want to know if the Commission is going to allow for development putting coastal resources and traditional and customary practices at risk or you're willing to promote reasonable decision making in keeping with your kuleana over water management in Hawai'i. At this point, you don't have the information necessary to approve this permit while upholding your duties as the trustees of this public trust resource.

We are inclined to ask for a contested case but that unfortunately puts the burden on Loke, Kim and Hui Ola Ka Wai, which is in violation of Ka Pa'akai, so would like to give the opportunity for the Commission to deny this permit, pending further investigation and reserve the right to request orally; and if we do ask, we would ask the vote be vacated; thank you.

QUESTIONS

Commissioner Buck – thanked Ms. Obrey for her testimony and asked if she had specific suggestions as a condition to deal with the bifurcation of approval of this well construction permit and potential approval of production wells permits and suggested language?

Ms. Obrey – the issue (in terms of representation of the Hui), is doing this permit without all the information, whether or not its bifurcated is up to you folks as how you want to deal with each step in the process but ultimately the information should be in front of you; otherwise, it's a piece meal if we roll forward with decisions without consideration of impacts. I don't have specific conditions I can recommend except more due diligence and comeback to it with a more complete record and address all the concerns that have come through my testimony and others before me; thank you.

PUBLIC TESTIMONY (CONT'D)

Dr. Jonathan Likeke Scheuer – my testimony today is offered as an individual even though I have assisted various entities regarding groundwater in the Keahou Aquifer including the National Park Service, DHHL and community members. I want to Mahalo Chair Case and Commissioners for your service; I myself have served over 9-years on Commissions, 3-years on the Oahu Burial Council and over 6-years on the Land Use Commission. I can say with great sincerity I understand how challenging your job is especially when you're asked as commissioners particularly highly technical analyses to make your decisions.

The one point I want to make for the Commissioners is that I believe the staff submittal is inconsistent and incomplete in a whole number of ways, but want to highlight one particular way; the multiple uncritical references to the sustainable yield (SY) of Keauhou. I believe we touched on a comment offered by you, Chair Case, to Deputy Manuel. Most people and parts of the submittal, seem to treat SY like a checking account balance as long as value "X" is lower than value "Y" we're all good. In the case of Keauhou, people say as long as pumping is below 38 mgd or as suggested by the County in their written testimony, below 80 mgd, there cannot be any problems with SY and there's problems with that.

Most people don't understand that the purpose of the robust analytical model or RAM, the equation used to calculate SY (shown RAM equation on paper) has significant limitations. First limitation is the RAM model is designed to only accomplish one thing; it's designed to protect wells from having unacceptable levels of salinity - that's it. That's the entire purpose of why RAM was developed by Mink and others and why it's been applying.

In case I sound overly critical, I want to point out to you that limitations and assumptions of RAM that I'm quoting from are directly from the State Water Projects Plan that your staff and consultants developed, and you (Commission) approved. RAM assumes freshwater occurred solely as a basal lens floating on top of saltwater; a condition we know does not exist in this aquifer. It assumes there's a sharp interface between fresh and saltwater rather than a transition zone which can be changed, flexed and narrowed due to pumping. It assumes the aquifer is entirely unconfined which is not true due to the high-level wells and deep confined system. It assumes aquifer properties are homogenous and that thickness is constant rather than for the case of a basal aquifer, its thickest at the inland layer and thinnest at the coastal layer. It assumes groundwater flow is uniform and laminar and that wells are optimally and evenly placed throughout the aquifer system, drilled to the same level of depth and pumped at the same rate.

RAM ignores the spacial distribution of recharge and if you stood on the shoreline of North Kona on the Keauhou Aquifer, you'd know by looking mauka that recharge is not uniform here. It also ignores well placement. The calculations of how much water is acceptable to be drilled is based on knowing what the initial head was of the aquifer or guessing. In Keauhou, we did not know before development what the initial head was of the aquifer. It doesn't account for convection of disbursement, variability in the transition zone, flow between aquifer systems, boundary conditions like cap rock, and by the staff's own admission – the needs of groundwater dependent ecosystems and only models flow in two dimensions, not three.

Dr. Scheuer (cont'd) – (referred to Commissioner Buck's question to Delwyn Oki) "...there's limits to our models, what are the limits...?" – If we're going to ask the same question, what's the level of confidence we have that SY of 38mgd based on an accurate model of the aquifer, the honest answer would be 0%. We know the model is inaccurate and an incorrect description of the Keauhou Aquifer. So, when you as Commissioners ask the necessary questions like "will

this particular well affect GDE or is there enough available water in Keauhou or enough for public trust uses?" all the references to the RAM model and the 38 mgd, are incomplete answers.

Mahalo nui for listening to my testimony and for your years of service.

DISCUSSION

Commissioner Beamer – I want to ask staff if we have updated authorized planned use as the County wasn't here.

Deputy Manuel – as of now, back in 2017 the submittal before the Commission of the draft Keauhou Water Use Development Plan, it articulated authorized planned uses as 28.07 mgd; that has not been updated. The current draft plan has not gone through County adoption has not been amended to increase or look at whether its increased or decreased; so that's the number we have on file. That 28.07 mgd would include existing pumping and authorized planned use as identified in the KWDP that the Commission approved in 2017.

Commissioner Beamer – we all understand this is a highly complex system and continuing to learn about and one thing I appreciate in this process has been how much we've learned about the Keauhou Aquifer System (KAS), groundwater dependent ecosystems (GDE) linked with groundwater discharge that we don't find in other places. When I look at our set of rules, I don't feel we're implementing those that we've governed ourselves by, is what I'm struggling with.

With authorized planned use, I know it's not easy to calculate, but when we're going to look at a permit in this area, I would expect us as a Commission, as staff to meet with the County not just the last plan approved, but recent developments with the County, Board of Water and Planning Department, to have an additional level of certainty that community and the water systems deserve. I'm also struggling with the bifurcation of the permit as I can't recall examples where we approve a well construction permit that's separate from pumping. I value the arguments made by Ashley from NHL. It does feel like if we approve the well construction, all these investments go into it, then we do a more thorough analysis of allocation of water, it's going to be hard to retrack.

I also want to thank Loke and acknowledge how difficult it is to testify for certain people amongst our community that are experts and have to take off work, so thank you for being here.

Deputy Manuel – if I can speak on the bifurcated question; there are times when wells have come in just for the well construction; will run a pump test and apply for a pump permit based on productivity or lack thereof; so we've done approvals bifurcated. The majority of those have been managed ministerially and did not come before the Commission at this point in time. The times they came before Commission, have been in water management areas. I wanted to highlight that Commission or staff (Deputy or Chair) have approved both WCPIP together and separately and a practice we've gone through.

Chair Case – in particular with this area, when this Commission voted not to designate the Keauhou Aquifer, it recognized this issue of the difference between groundwater dependent ecosystems impact to water withdrawals and the sustainable yields calculations and specifically

said they wanted to keep a close watch on this question in this area and in particular why we're bringing it back before the Board and providing the special conditions.

Also note with regard to the adequacy of information is another reason to bifurcate it here because the very information you need to make the best decision will come 1) from the symposium to dig deeper into impacts on traditional and customary practices where we don't have adequate information; 2) the well itself will give us a lot more information about the well and the tests will give information we need. It is an issue that's going to cost a lot of money to do the well and is a risk the applicant has to judge. This is an area, Kona in particular, where there's been a lot of development and a lot of water use and plans for further development. This is just the place where we have to keep a close eye on it and the reason to bifurcate and get more information in the process.

Commissioner Katayama – (to Deputy) asked the DWS submission for this comment was dated in March 2019, is that current status of the relationship with the different parties or can that be updated? I noticed they weren't on today's testimony, no one was here from the Department.

Deputy Manuel – the DWS was not here but submitted written testimony so there's an updated testimony on their behalf.

Commissioner Katayama – (to Roy) it would be helpful if you could comment on the impact of freshwater servicing the shoreline is measured as we go through increasing withdrawals?

Mr. Hardy – it's a tough one to answer; when you're in the tidal zone and all that mixing is going on, and it varies with the tides, and how much of that is attributed to just the basal area or high-level, and its three-dimensional-not just at the coast – we know that there's submarine offshore in deeper water and what's the percentage of that compared to near the coast or in anchialine ponds? Real difficult, but I think more studies on the NPS to look at their anchialine ponds. UH has been doing quite a bit – 'Ike Wai been funding alternative ways of quantifying and looking at getting at that question.

The more we look at this, the symposium would be a helpful way to gather all the different studies out there as I'm sure there's others we haven't heard of yet that Masters or Doctorates are working on, would help to get at what's the best way to monitor and come up with an adaptive management.

Commissioner Katayama – Kim testified that she has been taking measurements of salinity, maybe you can help rationalize or understand the impacts as we look at increasing withdrawals above.

Mr. Hardy – taking the salinity is just part of it, that's the physical hydrology. There's also the biological component of what it means to the biota – specific species and its thresholds.

Commissioner Katayama – as we get more information, we come more comfortable with looking at the ability to withdraw additional freshwater at higher elevations, thanks Roy.

Commissioner Buck – at this point in time I'm leaning toward approval of this item. I want to thank the staff as this has been a really complicated issue. When we did not designate this area as a water management unit, we worked hard in putting triggers in to have extra careful scrutiny

and I think the staff did a good job on this. This is hardly a ministerial item and reference to that is not accurate. I am concerned about the bifurcation and I think it's important for all current and future water developers in this area to realize this area has extra scrutiny and would like to add a written condition which I think is the intent of Chair Case and Commissioners is that "the approval of this well construction permit is not approval of a pump production well permit, which would be brought forward to the Commission as a separate item in the future".

I think it's important to make sure there's no confusion on that and the applicants and future applicants are aware that this is the process for production wells in this area.

Commissioner Hannahs – I want to join Commissioner Beamer in thanking those that took time off from work to be here Loke, Kimberly and others. Appreciate that your voice is important, and I'm moved that our fish, our loko need to be represented to and you've done an excellent job in doing that. On the same token, I'm disappointed that DWS is not here at the table, this is an important matter and wished they were here to speak on behalf of their plans and their issues.

To the people here, you represented yourself in very reasonable way and ideas. There's a community building here and that's what leaves me to be concerned about the motion (Mike). I appreciate your willingness to move it and came to be supportive of staff in having done all this work, but fearful as we get into some of the issues Ms. Obrey expressed, we'll start to roll into this decision to points we can't go back because of the weight of the investment. I'm wondering why we can't have that symposium right away? It won't be informed by the exploratory well, but that well would take time to develop and that pushes valuable discussion that we're primed to have right now, to a distant future; and in doing in taking in-action we'll start to drive these constituents to their corners, rather than to unity.

My inclination would be to defer the approval of the well per se but accelerate movement toward the symposium. Dr. Oki just presented this information, let's not just tick the box on movement, let's let it settle in and people discuss the knowledge and information that was just shared. Let the parties bring their ideas together and have the symposium sooner than later. It won't have the exploratory well information but maybe we'll have DWS at the table; we won't take an action that divides our community but action to help build the community. I appreciate the National Parks awaiting a longtime for this and this extends the process and won't get what they want today. I worry if we take another course, we might get a contested case that extends this further. We know people feel strongly about these issues, let's give them a chance to come together rather than put up resistance protecting themselves and things that matter most to them.

Commissioner Beamer – I'll piggy-back on that and support the idea of a deferral given what's been brought up, it says in our rules-to report on authorized planned use and feel we haven't done that and echo Commissioner Hannahs comment of gathering more information on T&C rights through the symposium as well as hearing testimony that Ola I Ka Wai and other groups wasn't included in this conversation.

When this was approved to take on a high level of adaptive management for the area, I anticipated it being truly adaptive. When we hear testimony about RAM and how that model doesn't seem to fit with this aquifer system, and yet we're relying on it to make decisions, those are the kinds of things we should be presenting to the Commission and update how are we thinking of sustainable yield for this area and not relying on models that clearly aren't helping us to be informed?

Why bifurcate? Have all the information presented to the Commission on building as well as pumping and make that decision well-informed with all the available data; even for the developer side so they don't put large amounts of investment and lose out in the long run.

(reiterated same points and reasoning of a deferral)

Chair Case – at this point we want to entertain a motion; the first potential motion I heard from Commissioner Buck to approve with an additional condition; and alternate motion I heard was to defer. – How do you want to proceed?

Commissioner Hannahs – I'm prepared to make that motion to defer and if it fails can certainly entertain other motions. My motion would be to defer action on the well permit and in lieu of that action, accelerate our commitments and expression of desire for the parties to come together in convening of a Symposium-2.

Chair Case asked for a second

Commissioner Beamer – sure, would you entertain an additional amendment to the motion Commissioner Hannahs?

Commissioner Hannahs – absolutely.

Commissioner Beamer – updating on authorized planned use, updating the Commission on the use of the RAM model for this specific aquifer system and ensuring Hui Ola I Ka Wai and others are included in these conversations on traditional and customary rights, I'll second that.

DISCUSSION

Commissioner Katayama – what are the benchmarks for this deferral that we want to see arise?

Commissioner Hannahs – they have a symposium and opportunity to discuss the USGS work and future plans of the DWS, and discuss impacts upon T&C, and RAM.

Commissioner Beamer – and those additional amendments suggested *(reiterated stance on needing up-to-date authorized planned use and the use of the RAM model)*

Commissioner Katayama – asked Chair for staff's comment on the ability to provide sufficient research on the proposed additional information.

Chair Case – if staff wants to add anything, they may. My main issue I think the crux of this is the impact of this well withdrawals of ecosystems and we're not going to get that information from a symposium, we'll get that from pump tests.

Commissioner Beamer – the challenge for me with that is having Dr. Oki's information just presented today; the more data we gather, the more we're understanding the connectivity and the impacts of groundwater withdrawals mauka and north and south on the park. We've been saying we need more data, the more data we get so far, the more connectivity we see, and the more harm withdrawals cause. It's imperative for us as a Commission to make a decision that

preserves the resource, not ask for more information when we're seeing that the decision can bring harm to the public trust resources that we're in charge of managing; there's more we can do here.

Chair Case – my recollection from the discussion at the designation is that the sustainable yield model is set in statute or regulation; if we have a long model, it needs to go through a long process to change the model. You could do a SY and separate public trust analysis and not sure this situation will be resolved. It is an issue – the issue is the SY model doesn't address the impacts to ecosystems and cultural use; we need more information. If we're going to rely on the SY model, it doesn't get us there and am acknowledging both sides to this.

I am bothered that the Department of Water Supply is not here (attending meeting).

(Chair Case read part of the written testimony provided by HDWS)

A few things from this 1) the DWS is just pointing to sustainable yield; 2) this proposal is to pump from the high-level and the assumption is going to reduce on basal source.

It is important to confirm that approach the County has. We're all hopeful that it's the correct approach that you can pump from the high-level aquifer and not have significant effects on the basal level at the coast. – They (the County) start out by saying they can't accept limitations on pumping, with all due respect-that's the Water Commission's duty, not the County's.

I'm still in support of the staff submittal with the amendments Commissioner Buck proposed so that we can get the information we need at this critical next step. What is the impact of pumping the high-level aquifer on the basal level? We're at a point we can answer that but will take someone with significant investment; and with the understanding that if the answer is wrong, it'll comeback to this Commission and we'll take a hard look at that.

Commissioner Hannahs – I appreciate your comments and sharing the DWS comments for the record; I feel like we need many steps, not just a couple big ones. Break it down and let people engage the information and share thoughts every step. The symposium-2 doesn't have to be the last symposium as this is a community of users with high integrated interests; so to come together with what we have and make them 'ono for the exploratory pump tests you've highlighted as it is important; but they have lots to talk about and address before we get to that point. If we wait, there's a concern they'll feel like those other issues were not important and we don't want to send that message. We can hold for a gigantic agenda or break this in pieces and encourage agreements along the way.

Commissioner Meyer – this is a tough one and difficult decision; the concept of going ahead and putting in a well and not have ability to use it is foreign. I tend to agree with you (Chair) in a sense that it would be helpful to try to ultimately get more perfect information. The right way to do that would be to put this well in operation and pump it for a year and determine by tests the ultimate impact. It doesn't sound like it's something we can or will do. I don't happen to think we'll get a lot of useful information out of a symposium in terms of impact. I think the right way to get that information and most direct and straight forward is to approve the permit and see what happens as we go forward; and we'll be smarter when we establish the pumping limitations in terms of the pumping permit.

Chair Case – (to staff) this proposed well location is outside of the (4) aquifer area with regard to the National Park, it's in an area that's heavily developed – I don't know what the freshwater discharge is in this area – is there a way to do pump tests with current wells to test the USGS model further?

Mr. Hardy – we do have a pump test going on and that's what's being reported right now from all the wells as far as total pumpage, water levels, and chlorides. With Dr. Oki's model, it's limited to just the basal-we have a lot of information in the dike area but that wasn't modeled directly. In lieu of that model, you do have the data. I'm saying that the continued reporting month-to-month and watching the trends as we have monitor wells to see how the thickness of the aquifer is changing. Deputy Manuel mentioned the Keopu Wells were noticing some indications of thickening of the aquifer, which is strange because we just fixed the original deep monitor well which was leaking a lot of freshwater. You would think there's less freshwater coming into there in that area the lens would've shrunken down so not sure what's going on there. We do have ongoing pump tests same with the water reporting.

Chair Case – what's the amount of proposed pumping from this well?

Mr. Hardy – 672,000 gpd

Chair Case – what would it take to pump that amount from a different well and do the isotope study and see the impacts on wells in the basal layer?

Mr. Hardy – an example the earlier question from Commissioner Hannahs on the QLT Well which hasn't been pumped that much – I don't know how long it'll be down and could turn it on and go up that amount – how that relates to isotopes and gathering of isotopes? That's part of the criteria you can look at as well as water levels and chloride changes, but this is from high-level. We can certainly use the observation wells mentioned in the submittal.

Chair Case – is this information we can get in 3-6 months at a staff level or requires a costly USGS study?

Mr. Hardy – it's the coordination between all the parties involved (the National Parks, DLNR, Ka Makana and Dept. of Water Supply) and how they're pumping. (DWS) they shouldn't be changing the pumping but keep it steady; with exception is the QLT well. I would say at least a year to get everything in order and I'm sure consultants would be hired for these guys and we can do ours or they can allow us to do that it's coordination. 6-months to 1-year is possible but hard to speculate. We're hoping the Kaloko irrigation well was going to be our deep monitor well but ran into problems with the owner; fortunately, we have a new well but it's getting close to the maximum depth on the DWS site directly above the park.

Commissioner Beamer – I want to mention for the record, I echo much of everything what Commissioner Meyer has said about the complexities and try to be adaptive and not knowing the implications without more wells and pumping. I do want to caution the idea the symposium and traditional knowledge is somehow secondary to analytical, quantitative or engineered knowledge systems. The courts and our duty as a Commission is to preserve T&C rights; the courts have been clear when we lack scientific certainty.

What we're supposed to do is take the cautionary principle to preserve the resource knowing that in these complex situations we don't have enough information. We're not supposed to say we need to drill or pump more to get more information, to learn, we have to save and I want to stress that with the utmost respect and I understand we all come from different backgrounds and experiences; and that's what's unique about the Commission, we're bringing these backgrounds and experiences together to preserve the public trust.

Chair Case – I'm going to respectfully comment on that; I think the issue is 1) we need to know what the natural and cultural resource values and the practices are—that's value of the symposium; 2) what would be the impacts of pumping? We can't get that from the symposium; that's the issue here and I'm trying to figure out if there's another way to get to the actual impacts.

Commissioner Hannahs – I would entertain an amendment to the motion to deferral to include some of the suggestions that staff should pursue those other means of getting that data incorporated and developed so it can be shared at the symposium.

Commissioner Kawaoka – adding to what Commissioner Beamer said; and I'll take it from the scientific/engineering perspective; I know there's a whole range of issues involved in the situation. This is a real dilemma; in the Department (DOH) we're faced that often but enough where there's huge consequences. I can understand where Deputy Manuel and Roy are going through; we're not going to get perfect 100% information but we're not there; just look at the modeling aspect. You can take the same model and have different people putting in different inputs and you'll have different conclusions. As technical managers, we're not experts in that area and are expected to make those kinds of decisions or propose it to our policy; and we're in that situation.

We can't take forever but if bifurcating this situation will get you that information and still be proceeding with the project, rather than get information we already have or doing additional efforts, I don't know how long it will take either way. We're certainly missing technically, a critical piece of information to go forward. If we stay with the bifurcation, we can get information in time to contribute to—at least from the technical engineering standpoint of what effects it's going to be.

From a technical standpoint, yes you want all the information you can but a lot of times that's not doable to make that recommendation.

Chair Case – I'm interested in knowing what we could do on a deferral with a much more abbreviated timeframe. Right now, we have a plan for a symposium by August. Could we try to evaluate both the symposium and review the USGS study in conjunction with the information we have to see if we can come up with better projections or ways to get an answer without drilling a new well; a short answer to refine it better, before making this commitment. I'm hearing even if we bifurcate it, it creates a risk of a heavy investment and later making a tougher decision later on.

Commissioner Buck – obviously with the RAM model we're not going to change because it's by rules, but know the RAM does not include some of the ecosystems; in using the precautionary principle, it would be helpful if we came up with a number we believe is

appropriate for this aquifer and potentially could be a deliverable-a short-term of the symposium.

This is going to be a long-term issue. Water development in Kona is going to be controversial from now on, no matter what it is; I think if we can have a number that's lower than RAM that represents traditional, cultural and ecosystem attributes, that frame might help us. If we can do it in a short amount of time, then a deferral makes sense at this point.

Commissioner Katayama – can we put together a series of existing wells that will withdraw the 700gpm and that way avoid the installation costs of drilling and going through a pump to get the information we need? Would a 30 or 60-day deferral to allow staff to evaluate these alternatives to see if there's something that would be adequately put together to help us move forward? It would actually be quicker pace.

Commissioner Beamer – I'd like that idea if we can use wells that are already drilled and can be better informed and also agree with Chair and others that getting more information and data would be helpful and that seems like a lot of sense.

I'm not clear if the RAM model is something we can't deviate from in specific instances and is something we can look to as staff. If we're acknowledging the model doesn't work for the ecosystem we're supposed to be managing, that feels like we have a fiduciary duty to adjust our management and usage of that model. We can get some updates from staff as to a different approach.

Deputy Manuel – Mahalo Commissioners for the conversation and dialogue, I appreciate it in my capacity as Deputy to understand where your concerns are and potential areas for improvement; I take that as constructive criticism and suggestions on improvement. Hearing the conversation, the applicants are here-NELHA and HHFDC (still online) and a deferral would impact their timeframe and potential requests for contested case; there's a lot to consider in this process.

At this point, hearing the conversation about deferral and the motion by Commissioner Hannahs and seconded by Beamer, we can try to look at within the next 30-60 days to come back in 2 months to address- the questions and concerns of the Commission and either continuing with the recommendations as drafted by staff with amendments; hopefully we can get answers to the questions raised related to authorized planned use updates, alternatives to RAM to determine sustainable yield, whether or not a tightened timeframe for a groundwater dependent ecosystem symposium could be held, and ultimately who pays for that. Right now, the recommendation is that HHFDC agreed to pay for it, tied to the approval. If we're deferring, that is something we have to potentially fund on behalf of the Commission. Those are things I'm thinking through as this conversation is occurring.

If we set a timeframe to defer to and shall comeback by June to the Commission with a report of these outstanding things, I'm okay with that but don't know from the applicants point of view if they have concerns, questions or suggestions.

Chair Case – if I can add to your list – the question of is there a way to do an alternative pump test?

Deputy Manuel – and to clearly understand and articulate in more detail from what Roy has said – what are we seeing from our survey branch in our observation wells – water levels, chlorides, etc.? And to lay it out very clearly for the Commission; I’m hearing that’s something that needs to be presented more thoroughly and how this pump scenario/test-what will it/or not show? There’s testimony today that believes the pump test won’t show anything and the delay in pumping may not be seen for time.

In 60-days I think we can come-up with something that clearly lays out approval or strategy to move forward based on this conversation.

(Chairperson Case asked for a motion)

Commissioner Hannahs noted the amendment of the motion to include the direction to staff to look at alternative ways to provide the pump test data.

Chairperson Case acknowledged and stated all amendments to the motion: to comeback in 60-days; address sustainable yield versus alternative models and what is the legal and practical framework; review what we know from existing wells and the possibility of a pump test.

Commissioner Hannahs added to determine if we can hold a symposium to have a discussion by key stakeholders of the information we already have.

Chairperson Case noted adding to include the plan for the symposium and the information we want from the County – Chairperson Case asked if the Commissioners were in agreement with the added amendments; there were no denials.

Commissioner Meyer – asked if we need 60-days; if it can be done in 30-days?

Deputy Manuel – answered due to the mass coordination of agencies and a short turnaround timeframe to be on the following month (May) agenda, would be very difficult.

Commissioner Beamer – appreciated Kaleo and the CWRM staff and certainly none of these comments were critiques on your work and leadership; we’re in the midst of learning about this ecosystem and it’s been ongoing. I think it’s one of the most complicated areas of water resource management; certainly in Hawai‘i and perhaps other places in the world. We got to learn, and this conversation has been great, Mahalo to all the Commissioners for sharing.

**MOTION: (HANNAHS/BEAMER)
To defer B-2 with added amendments.
UNANIMOUSLY APPROVED**

Chairperson Case thanked the Commissioners for a robust discussion on a challenging topic with lots of pieces of information and perspectives and an important prop for us.

Commissioner Hannahs commended Chair Case of her leadership.

RECESS: 12:43 PM

RECONVENE: 1:15 PM

Commissioner Kawaoka excused himself for the remainder of the meeting.

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C. INFORMATIONAL BRIEFING (CONT'D)

2. Maui Department of Water Supply – Moloka‘i Water Use and Development Plan Update Process

Mr. Neal Fujii of CWRM Planning Branch introduced the submittal item as well as Ms. Blumenstein of Maui Dept. of Water Supply and Mr. Tsuchida of Townscape, Inc. Staff intends to bring an action item submittal to the Commission to approve this scope of work in the following month.

PRESENTATION GIVEN BY: Ms. Eva Blumenstein, Planning Program Manager,
Maui Dept. of Water Supply

Mr. Bruce Tsuchida, President, Townscape, Inc.

Ms. Blumenstein provided a summary update of the MWUDP which was last updated in 1990. The Lāna‘i plan was adopted in 2011 and in late 2015 started the public process for Maui Island update. All six (6) regional plans were completed in 2018 where each regional plan is an aquifer sector. The last briefing with this Commission from MDWS was in May 2018, shortly thereafter submitted the draft plan to MDWS Board for further public hearings, then later to the County Council for review in March 2019, then later passed for full adoption in August 2020 then came to a halt as County Council suggested more community input, leaving the plan currently held at the Council.

To not ignore the important water resource issues on Moloka‘i and hold up the process any longer, the consultant Townscape was hired to assist with this community-driven water plan.

Mr. Tsuchida gave a PowerPoint presentation of the MDWS-MWUDPP. Townscape is in the early stages of the community outreach process and still have some ways to go. The entire island of Moloka‘i is a groundwater management area (GMA). The Department of Hawaiian Home Lands is a major water supply manager in which it provides potable water to 580+ customers servicing roughly 2,400 people.

The three (3) core principles of the Moloka‘i WUDP must be based on an understanding of the complex land and water process; include the effects of climate change; align with other existing plans; have a community-based engagement/process; and respect for native Hawaiian resource management practices that reflects the cultural traditions and practices.

The timeline and schedule of the project was noted

PUBLIC TESTIMONY

Mr. Kaniloa Kamaunu – Aloha Commission, I’m from Maui, Waihe‘e. One of my reasons I’m participating today even though I’m not a member of the community on Moloka‘i, is the

Water Development Plan. In the appendixes, we as a people are in appendix-10 and what alarms me is referring to us as Native Hawaiians. For me, I call it “slave” (*referred to the 1959 Admissions Act and spoke of citizenship and the 1993 Apology Bill “...we as a people never gave up any consensus to be a part of this process of Annexation...”*). According to this analogy, land and its resources are altogether, and it’s our practice to as far as kānaka. For us to be a second thought or put down on being looked at, then making light of our significance as far as having vested rights in our resources; here in Hawai‘i, United States has no actual patented lands. These lands still have patent under the Kingdom of Hawai‘i and with that, all the rights and privileges that’s there, which are water rights.

The issue I have with the WUDP, is where you place us as we are the ones with protected rights. It is the policy of this government, this public trust you speak about that belongs to us that you’re entrusted to protect on our behalf which is not being taken care of. Our resource is being damaged. I drank the water at Honolulu and it sucks; I come from Waihe‘e, I know what good water is. In my home, I don’t have any county system, I still live off the land as many of my brothers and sisters do on Moloka‘i.

For me, I’m oppose to this Water Development Plan because of the misuse and misunderstanding of us as kānaka maoli and our rights to the resources, especially a resource as water. When you look at the WDP here on Maui, there first concern is economics and how they’re going to provide developers with water.

If you pass it this time or agree with it, I’m putting you on notice that our rights are not being secured in this process (*noted HRS statutes regarding kūleana*). I’ve come in front of this Commission since 2010, for Nā Wai ‘Ehā, various permits, and recognized by CWRM as having superior rights; so I exercise that right that the Commission continue to protect that and the discussion should be brought to us and the County shouldn’t have the right to have authorization to make plans for a source they don’t rightfully own as I don’t see anywhere that states the State of Hawai‘i, the United States or County of Maui were given power over water.

This is my testimony, thank you very much.

PUBLIC TESTIMONY (CONT’D)

Dr. Jonathan Likeke Scheuer, behalf of Dept. of Hawaiian Home Lands – Aloha Commissioners. I want to acknowledge and thank Eva Blumenstein and Bruce Tsuchida that even though they’ve only been in this process for six (6) weeks, we’ve already had our initial meeting with them, had productive discussions about how to specifically target DHHL and its beneficiaries and homesteaders as one of the fully recognized public trust users of water and we look forward to continuing to work with them in this process; thank you very much.

QUESTIONS

Commissioner Buck – (to Bruce) commented that Moloka‘i is not O‘ahu; people are engaged in the water issues. I wouldn’t show that PowerPoint at your fist meeting and put some recognition to (as everyone knows) the existing issues, so getting it upfront will help you as you work with the community.

Commissioner Hannahs – I want to thank Mr. Kamaunu for his testimony and assure him that the kānaka maoli interest will not be ranked “10” in this study and I’m sure Bruce will concur with that. (to Bruce) the name of the plan seemed to be poised at the backend of the privilege of having access in having use of the resource. What about the frontend of conservation in assuring watershed management? It doesn’t feel like this report addresses that.

Mr. Tsuchida – the title of the plan comes from the guidance for Water Planning in Hawai‘i so it’s not meant to exclude those natural resource and watershed management issues at all and we’ll certainly be looking at those resources and issues. However, I need to be clear in what we’re not scoped to do in this plan-this plan is not going to try to articulate specific land, forest and watershed management programs. For Moloka‘i, the constituencies for issues related to those are extremely complex and in our judgement this would perhaps be a companion plan but not at this time included in this scope.

Commissioner Hannahs – when I look at holistic understanding of land and water resources and respect of native Hawaiian culture traditions and practices, it encompasses a sense of reciprocity and understanding that you don’t have the use, if you don’t have the responsibility to care for the resource. I’m confident the people of Moloka‘i will put that on the table and interested to see how you deal with it.

Deputy Manuel – as a planner, I’m excited about planning processes and worked closely with both Eva and Bruce. To frame this comment about watershed and the protection and conservation measures, those rest in the Water Resource Protection Plan that is the overarching framework that then feeds into the Water Use Development Plan; it supposed to limit this “use” only after we’ve addressed the conversation and protection policies of the resource. Imbedded in that is the sustainable yield conversation and imbedded in that is the identification and quantification of instream flow. It’s supposed to give counties the ability to understand of how much water is available for use.

Noting what you said, the reason why bringing this as an informational item is to give better guidance and if we need to tweak the scope as once the scope is approved by the Commission, it’s the marching orders for the County. It’s better to deal with framing and scoping now versus at the end of the process. It’s noted and we can circle back with Maui County and talk through some of those issues.

Commissioner Beamer – Mahalo Bruce for his presentation and commented to distinguish certain issues for example Well 17 and in setting IIFS’s, may want to relate that into the scope.

Mr. Tsuchida – we are going to look at those issues relating to existing wells, sustainable yields, new wells, and other water systems there and how well they’re working or not. If it’s not working, then what are the potential solutions for those systems including management solutions as there are multiple water entities operating different water systems on Moloka‘i and preliminary from what we’ve looked at, that’s not in the best interest of the resources nor of the community to have so many different systems.

Ms. Blumenstein – that was some of the challenges we faced in updating the Maui plan because of so many water resource issues that were occurring while developing the plan with contested cases being resolved. Meanwhile, the community wanted the plan to resolve those

issues at the same time we needed to integrate the decisions as they happen, then adapt and adjust the plan; we're up to two (2) addenda already so it's a learned lesson from Maui; we have these unresolved issues that will be discussed in the plan but, may not all be resolved but concurrent.

Commissioner Beamer – it's great and respects the work the community has done over the many years which is also key-honoring the work the community had for justice for water, Mahalo.

Commissioner Katayama – (to Bruce) reading through your proposed work plan, what is the balance between looking at ground and surface water?

Mr. Tsuchida – we don't have a detailed answer to give you today; but in general, we are going to look at surface water in detail because of the relationship of groundwater to surface water and surface water to near-shore waters. We know that the near-shore water quality and biota is a big concern on Moloka'i including the coastal fishponds, so it's high on our priority.

Commissioner Katayama – asked if it will be addressed in task #2 & #3 to encapsulate the relationship and resource potential?

Mr. Tsuchida – yes; but we're going to look at those relationships throughout the planning process and through our first discussions with community, it has already been put on the table.

Deputy Manuel – noted to Commissioners to review the scope to see if there are additional edits or recommendations and forward to CWRM as CWRM will regroup with MDWS and Townscape to address those or make amendments as the idea is to bring it back to Commission, ready to approve scope by next month.

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C. INFORMATIONAL BRIEFING (CONT'D)

3. Draft Amended Interim Instream Flow Standards for the Surface Water Hydrologic Unit of Wai'oli (2018): Wai'oli Stream, Halele'a, North Kaua'i

Deputy Manuel requested to combine hearing of the C-3 & C-4 briefings back-to-back before questions as they both complement each other.

PRESENTATION GIVEN BY: Dr. Ayron Strauch, CWRM Stream Protection & Management Branch

Dr. Strauch provided a PowerPoint presentation of the briefing subject. Touched base on the geology and topography of the area which has one of the oldest watershed systems of the main Hawaiian Islands. There are two (2) active USGS gaging stations in this region of North Kaua'i, one located in Hanalei and the other in Wainiha. Dry season rainfall has steadily declined within this general area from 1920-2012 and annual and wet season rainfall

has declined more recently. Generation of the modeled low-flow characteristics were explained and the recent point measurements were taken and shared of the Wai‘oli Stream, tributary and ditch intake with comparisons to Q-value estimates of nearby USGS stations.

The recommendations moving forward for the Interim Instream Flow Standards (IIFS) for Wai‘oli Stream are with the understanding we need to collect more data and amend the recommendation at a future time, but that shouldn’t stop us from making a reasonable decision in the near future.

The mānowai, po‘owai and ‘auwai all feed the various complexes of kalo throughout Wai‘oli and into the Hanalei area. With the recent flooding and movement of boulders, it has wreaked havoc to the reconstruction of the mānowai and po‘owai. A temporary mānowai was then created above the East Wai‘oli Ditch area and photos were shown and explained of the system in reference also to its tributaries.

There are many various instream uses of the surface water which also provides biota habitat. From the 2016 satellite imagery, there are over 100+ acres of lo‘i complexes in Wai‘oli area. The proposed IIFS was based on the estimates of water available at the mānowai, po‘owai and tributary combined.

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C. INFORMATIONAL BRIEFING (CONT’D)

4. Wai‘oli Valley Taro Hui - Aia i Wai‘oli ke aloha ‘Āina: Perpetuating Aloha ‘Āina in Wai‘oli Valley, Kaua‘i

Dr. Kapua Sproat, UH Law / Ka Huli Ao introduced the briefing item and presenters.

This project started in the Spring of 2019 working on a Right-of-Entry an easement for the farmers and are currently working on a long-term water lease including the IIFS. *(Dr. Sproat appreciated Deputy Manuel and Dr. Strauch for collaboration as well as this represents a best example of inter-agency coordination working on native Hawaiian traditional and cultural practices with the community).*

PRESENTATION GIVEN BY: Mr. Devin Forrest of Halele‘a, Kaua‘i
Ms. Joann Kaona, Wai‘oli Valley Taro Hui

Wai‘oli, meaning “joyous water”. Derived from numerous mele, we can understand how the wai is related to this place as well as how it moves within this area and how it is all interconnected, feeds and sustains this land area and people. It is also through mo‘olelo that Wai‘oli is shared. Kalana is a traditional Native Hawaiian land division associated with biocultural resource management and community identity rather than governance. Newspaper articles dating back to the mid 1860’s also suggest a farming association created and referenced as being the Farmers of Wai‘oli. The Hanalei Bay Watershed serves as a single integrated system to maximize cultivation of traditional crops and to distribute water resources.

Looking at modern maps, it shows the same water system ways as did in the pre-modern era. With the vast amounts of rain that comes through this area, it is prone to heavy flooding which has always been a significant problem. Through this process, and in order for mitigation work on the mānowai to begin, it was discovered that key kalo infrastructure lays on State Conservation Land. Being so, a numeric IIFS is necessary for the Hui to apply for a long-term water lease under HRS-171.

Ms. Kaona explained how the Wai‘oli lo‘i kalo irrigation system flows into the numerous lo‘i kalo farmed by various ‘ohana. Noted, the use of the wai is instream and non-consumptive. Due to the recent flood damages, 2018, 2020 & 2021, the Kaua‘i County, Mayor and State Representative has helped to secure emergency funds to assist with repairs to the māno and ‘auwai; still heavy rains caused damage in which it basically got fixed, broke, fixed again, and broke which caused other māno to open naturally feeding the po‘owai. The many photos documents how the river quickly changes due to floods.

There are many ho‘i returning water back to Wai‘oli Stream and Hanalei River which all feeds Mahamoku (Hanalei Bay). The Wai‘oi Valley Taro Hui is a 501(c)(3) which formally organized after the 2018 floods and consists of about a dozen ‘ohana farmers with generational ties to this area. This done as a way of life, cultural practice and feeding its community.

The water levels are monitored daily and noted that the po‘o takes about less than half of the stream’s flow.

[Dr. Kapua Sproat noted the Hui’s written testimony in strong support of Ayron’s recommendation in setting the IIFS and noted that the farmers requested to work with Deputy Manuel and Ayron to craft a reporting schedule and requirements that are appropriate and specifically be quarterly as oppose to monthly and to support the farmers efforts to maintain and perpetuate this ancient system of Kalana.]

Chairperson Case thanked the presenters.

QUESTIONS

Commissioner Beamer – appreciated the presentation and the way it was bridged with historical documents, looking at mele and honoring the traditional resource management practices. Also appreciated the diagrams and speaking of the water ho‘i and its movement throughout the system. Applauded the community resilience in working together through the floods and rebuilding and forming a 501(c)(3); asked what can the Commission learn about working with other communities to move initiatives like this forward?

Ms. Kaona – collaboration of the community members with help also from Kapua and others along the way

Dr. Sproat – this has been an incredible educational opportunity with assistance also from the clinic within the past four (4) years; the past two (2) years we’ve had (33) students and four (4) attorneys that spent vast amounts of hours working on compliance through collaboration efforts with Ian Hirokawa, Linda Chow of DLNR and mahalo to Ayron and his efforts. Also thanked all the Kaua‘i County reps and Mayor Kawakami for collaborative efforts as well.

Commissioner Beamer – what other efforts can you share as an example, are our fears unwarranted?

Mr. Reid Yoshida, President, Wai‘oi Valley Taro Hui – our situation is unique in a sense that our families go back generations and were friends with one another; and of course, butted heads at time but, have figured out our squabbles within our group. If we had to figure out the IIFS and permitting, we as a group (on our own) couldn’t have done this and figured this out on our own and were fortunate with Kapua and her group to bridge that gap of information and processes. We struggle enough just to keep the taro growing. Prior to 2018, I wouldn’t have thought we would be organized as the way we are now, as far as organized on paper instead of just being twelve (12) families that go back 100-years. I do understand your point of mitigating, but I think our situation is a little bit different.

Dr. Sproat – noted on the farmers resiliency and added that they should not have to have gone through the 171 legality of a DEA process but are grateful for the outcome and collaborative efforts of everyone that was involved. Respectfully, these farmers are the experts of how water-use and watershed management should be. You (CWRM) should just ask them, “how much water you need?” because they know what is needed to mālama the stream and lo‘i. This is a great example and look forward to working closely with CWRM-Ayron and Kaleo.

Commissioner Katayama – asked of the low-stream flows identified, what do the farmers actually use in terms of daily flow?

Dr. Sproat – it’s about half and varies overtime. All the farms (farmers) all filed declarations of water use and verified and recorded water use of 13.5mgd; however even three years after the floods, they’re still in basic recovery mode and less than half of the acreage has been put back into cultivation.

Commissioner Katayama – are they looking at 100 acres of kalo under this system?

Dr. Sproat – historically, there was but due to the 2018 and recent flooding the river completely re-routed itself. We have some lo‘i that will no longer be able to be cultivated and as part of this recovery effort, we’ll be able to determine what will be restored and planted.

Commissioner Buck – asked why are they are going through 171 for the water license instead of traditional and cultural under the water code, is that because of a commercial aspect?

Dr. Sproat – because the māno, po‘o and ‘auwai are on conservation land and comes through cultivation all on private land which is zoned-Ag; however, you made an important point as the farmers could use their appurtenant rights (quoted 174C-63) and there’s room for discussion on that.

Commissioner Hannahs – Mahalo to the Hui and Kapua and commented on other successful Hui’s work and these type of successful networking and noted that this Hui should be modeled throughout the pae ‘āina and wondered if Ka Huli Ao and other agencies can work with communities to establish this (referenced item B-2 matter and a symposium) for a

mutual benefit of all and encourage this type of networking of how business and relationships develop around water, across the pae 'āina.

Dr. Sproat – noted the encouragement and hope this would be a model and that decision makers can see what's going on in places like Wai'oli and be inspired of how water can be respectfully managed and shared using indigenous knowledge especially in these times of climate crisis.

PUBLIC TESTIMONY

Ms. Alexa Deike, UH Law Student – Aloha Chair Case and Commissioners, I will be brief as you had a long day and thankfully Professor Sproat already mentioned the parts I wanted to highlight. I'm a student in the Native Hawaiian rights clinic but also in administrative law.

I want to highlight that this is a great example of inter-agency collaboration of partnership with the community and would hope it would always go this way. The Hui for us is a legal unicorn and how different this IIFS is because here, we're protecting and strengthening traditional and customary native Hawaiian rights. For me, I'm from Germany but live on Maui; Maui is my home. Of the IIFS and conflicts I've seen there and testified on were always about restoring streams and we're doing something different here.

The only ask I have, Chair Case, in last year at the BLNR meeting for the Hui's perpetual easement and RP, you mentioned that what we're trying to do here is fit an old system into a new legal system; I completely agree. What I propose, is how we can best do that is to amend this IIFS in May because the Hui can finally move forward and take the next step and would like to ask the Commission make an explicit finding of the Hui's appurtenant and traditional customary native Hawaiian rights which Ayron has already laid out in the staff submittal. The Hui is excited to work closely with Ayron to give any additional information he needs, providing this will not hold up the process and that we'll have the amended IIFS in May; thank you.

PUBLIC TESTIMONY (CONT'D)

Ms. U'ilani Tanigawa Lum, Ka Huli Ao – Aloha Kākou; I'd just want to take the time to say Mahalo for your time today and thank you especially to Ayron and Kaleo for your work on this and really express my support and support for the farmers Wai'oli Valley Taro Hui; Mahalo nui.

Mr. Kevin Fernandez, UH Law Student – Hi everybody; thank you so much for all the work you've done. For the most part I'd like to stand on my testimony but add similar to Alexa's point, about fitting an old system into a new legal system. I think this is a perfect example of drawing upon the ancestral knowledge they contain to figure how to better the current legal system we have; thank you.

Dr. Jonathan Likeke Scheuer, behalf of Dept. of Hawaiian Home Lands – Aloha. It's a small part of this effort but the Hui, your staff worked very closely with DHHL because of water lease from State lands was potentially implicated that caused for an establishment of a

reservation of water if needed by DHHL as well as potential leasing fees. We worked closely with the Hui and CWRM staff through a beneficiary consultation as noted in Ayrón's submittal. The Hawaiian Homes Commission voted to not seek a reservation of water from this stream and seek no licensing fee; in lieu of a licensing fee, seek educational opportunities for our beneficiaries, particularly the community of Anahola who are pili to the communities in Wai'oli. We're very supportive of both the presentations by the Hui and the staff submittal from Dr. Strauch; thank you.

Chairperson Case reminded these were informational briefings and thanked and appreciated everyone's efforts especially all the testimony from this place as it was heart-warming.

Commissioner Buck – asked if we know of an expected date the IIFS will show up on the agenda?

Deputy Manuel – working with community, it was based on this conversation today and sounds like there were no questions specific to Dr. Strauch's recommendations and we'll bring it back next month for approval or action item from the Commission. Hearing the testimony today, we'll look at the recommendation on whether or not to add an item to recognize appurtenant rights or traditional and customary practices as articulated and defined in the staff submittal.

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C. INFORMATIONAL BRIEFING (CONT'D)

5. Status of Request for Surface Water Reservation of 2.00 Million Gallons per Day for the Department of Hawaiian Home Lands and Draft Interim Instream Flow Standards for Honokōhau and Kaluanui streams in the Surface Water Hydrologic Unit of Honokōhau (6014) and Honolua Stream in the Surface Water Hydrologic Unit of Honolua (6013), West Maui

PRESENTATION GIVEN BY: Dr. Ayrón Strauch, CWRM Stream Protection & Management

Dr. Strauch gave a PowerPoint presentation and stated the summary of request. Maps were shown with the diversions and wells explained. Currently, Mahinahina Treatment Facility is the largest single user of water from the Honokōhau Ditch. The timeline of the IIFS establishment in Honokōhau and Honolua was briefed upon and the outline of the presentation was highlighted. The waste complaint timeline was given and briefly touched on and the November 2019 Commission Order was also noted. Photos of Intake #1 (Aotaki Weir) was shared and explained.

A map of the DHHL Honokōwai Lands were shown and the general land area explained with the DHHL Honokōwai water reservation request consisting mainly of Ag use. Noted was the water rate for the parks land use which may decrease as appropriate. The map area of the non-instream uses of Honokōhau Stream water were shown and explained.

The Kapalua Water Company was recently sold to Hawai‘i Water Service, which operates three (3) wells and serves roughly 4,200 people. Within the Maui Water Use and Development Plan, the Lahaina-Nāpili System has 94% categorized as domestic use. USGS station 1662000 has been around for 100+ years monitoring the availability of the water in Honokōhau Valley, that’s provided one of the longest continuous data records across the state. Below the USGS station is two (2) tunnels and a natural spring discharge producing a total estimated median flow of 3.4 mgd. There are many instream uses upon Honokōhau Stream which also provide habitat for many native biota. To support instream uses, water has been released at Taro Gate (Adit 15) since the 1990s.

The 2020 extreme drought conditions were graphed and explained of Adit-6. To address the waste complaint, CWRM staff installed a monitoring station at Mahinahina Weir and the graph data was shown and explained. Water is being removed from Honokōhau Stream in excess of existing demands that does not meet the reasonable beneficial use criteria. In order to address the formal waste complaint as well as establish DHHL non-potable water reservation, CWRM staff suggests establishing instream flow standards which is necessary to protect public interest in waters of the State which is guided by the State Water Code.

There are two (2) water alternative options: 1) Hawai‘i Water Service has current installed capacity in two (2) groundwater wells with an additional unused well; 2) the use of R1 water. Honokōhau Stream IIFS will be implemented in a two-phase process with phase one to be implemented at any point for flows protecting instream uses; with phase two as protecting public trust uses by maintaining at least 50% of water in the stream at all times, noting the stream has no alternative source. In Honolua Stream, the IFS recommended is its natural flow.

Chairperson Case thanked Ayron for the presentation that was filled with lots of helpful information for the proposed IIFS

QUESTIONS

Commissioner Beamer – appreciated Ayron’s effort, hard-work and thoroughness in thinking through the waste issues, reasonable and beneficial uses and feels the proposal for “50%” makes a lot of sense and look forward to hearing other questions and comments

Commissioner Meyer – referred to DHHL’s proposed long-term reservation for sole use of the last 2 mgd of potable water on the dry West side of Maui and use it for non-potable irrigation and seems not of what irrigation water is all about. It’s my understanding the County of Maui Environmental Management Department is treating all of the sewage water at Lahaina Treatment Plant to R1 status and currently less than half of that is being used now and have runout of potential users although they have (2) large reservoirs. Is that your understanding as well?

Dr. Strauch – the key issue is that not that the water is treated to R1 but that the chloride content of the water is insufficient for agricultural crops. Because of leakage problems in the collection system on private land that the County cannot force upgrades to, the wastewater itself is saline. The proposed DHHL reservation is irrespective of the availability of R1 but hopes that the water could be blended between the potential 2 mgd from Honokōhau Ditch (that would be reserved for DHHL) with the R1 water to lower the chlorides to get perhaps

4mgd of water available for Ag use that could be a huge benefit for the West side in terms of Ag sustainability.

Commissioner Meyer – agreed as the R1 water will be on DHHL property and wouldn't require pumping and the blending wouldn't require the need for the 2mgd but perhaps less and would have more availability for community use as the need is for potable water for the foreseeable future as it doesn't seem to be an efficient way to use it. (*discussed and voiced concern of the 1.3mgd pumping/usage*).

Dr. Strauch – the 1.3 mgd is primarily in Kapalua so the water wouldn't be put in the ditch it would be used within the resort irrigation needs. During low-flow conditions, there isn't enough to meet everyone's needs so with the availability of groundwater as a back-up source or even R1 as backup as the stream itself doesn't have a backup. There's efficiencies that can be made and the resort/golf course irrigation needs are around 1.8 mgd and the fact it's currently being diverted 8.5 mgd even taking in system loss and Maui County's current 2 mgd use, there's a good 3-5 mgd that's not utilized-so where's that going, keep it in the stream.

Commissioner Meyer – is Maui Land & Pineapple (MLP) being cooperative on the work to Intake #1 at the Aotaki gate diversion repairs and are moving ahead with the syphon repair plan with the County?

Dr. Strauch – the County's MOU with MLP to my understanding requires the Honokahua syphon to be monitored and repaired as needed, but that need is not right now. They will collaborate with repairs as needed moving forward. For the repairs to Aotaki Weir, they enlisted Akinaka & Associates to consult and between the pandemic situation, limited access and storm events, they've had limited access so at this point I don't believe they have moved forward.

Commissioner Hannahs – (referring to DHHL's reservation) after we've granted a reservation and find there's a better way to fulfill it, are we free to go back and revisit the reservation and change it? If we act now based on the current information and if conditions change in the future are we able to go back?

Dr. Strauch – I do know the current wastewater system because of problems on private land, the County can't force upgrades to the collection system; there's salt-water intrusion into the system and that limits the use of R1 water and blending it would be beneficial for everyone that uses the system.

Deputy Manuel – I do want to highlight that this Commission, after the State Water Projects Plan was adopted, it also reserved water state-wide for DHHL's needs and those primarily focused on groundwater and potable needs of DHHL. Within that submittal it directed that when we're amending instream flow, we consider the non-potable needs of DHHL as part of that process; so, we're being consistent with what the Commission articulated as how it wants to approach surface water reservations (non-potable) for DHHL. Because Ayrton has been doing work in this region, and that Honokōhau Ditch could service DHHL lands, we're recommending this be married together as part of the setting and establishment of IIFS. It is one of the public trust uses we need to account for.

The Commission ultimately always reserves the right to revisit its decision making and to amend its decisions as it sees fit, as more data is available or as additional needs come.

Commissioner Hannahs – commented on Ayron’s skills in community outreach and asked on the whereabouts of certain community members and noted due to the pandemic its more challenging for people to attend the meeting.

Dr. Strauch – noted he did reach out and been continuing to work in West Maui areas consistently even during the pandemic.

PUBLIC TESTIMONY

Mr. Gil Keith-Agaran, Counsel for Maui Land & Pineapple – Thank you Chair Case. We’re available just as a resource if there’s any questions from any of the members about where we are. I think that Ayron summarized the steps we’re taking that MLP was able to take. They were fairly limited in some of the follow-up they had but did move forward on the petition to abandon; but limitation in getting their consultants over to some site inspections and the information gathered which has been shared with Ayron and other CWRM staff, on thoughts what could be done at different places to provide information as Ayron described as lacking and to address how much water is going into the ditch and how to return that water to the stream that’s not being used. We’re here to respond to questions and get a sense of where the Commission would like to go based on information received today.

Mr. Paul Subrata, Maui Land & Pineapple (MLP) – Thank you Gil, Commissioners and Ayron for the presentation; I think it was very helpful in summarizing what we have done in terms of the action items since our last meeting in November of 2019 and spent quite significant resources to make sure the ditch is fixed from the storm damage, cleanup and inspect as much as we can and make sure the County of Maui and the community (we met) at Honokōhau Valley, we were supposed to meet again, but the pandemic happened. We are working and making sure that different parties including primarily the County of Maui Water Supply is getting what they need in collaboration.

We made sure all the five (5) action items, I believe four (4) we were able to accomplish, except for one (1) item – the remote-controlled system at diversion 770. The location is very remote, it’s not feasible. We’re having our engineer and consultants are having challenges moving forward in accomplishing that action item. We have alternatives I think will work but ultimately would like to request the Commission to wave this condition for the automated gate system and put a simpler or a hardware that is not out of reach to make sure there’s no waste and that it is being controlled during high flow, as versus putting a gate that goes up and down and try to control up to 20mgd, the ditch can take up to 60mgd and not having power in that area proving to be quite a challenge.

Our request is to see based on the information that Ayron provided and the progress we’ve made with the community and different parties on all the different action items to consider perhaps the remote control can be in a different form or an alternative can be considered that is more viable for Maui Land to implement.

Dr. Jonathan Likeke Scheuer, behalf of Dept. of Hawaiian Home Lands – Aloha Commissioners. Like Mr. Keith-Agaran, we’ve worked closely with Ayrone on these efforts and appreciated his patience as the Department works through its Honokōwai Homestead Community Master Plan and Environmental Review; we’re supportive of the proposed reservations, it’s consistent with your duties under section 101 of the Code as well as the State Water Projects Plan preference to match a non-potable source like the water in this ditch with the non-potable needs we have. I’d be happy to answer any questions.

QUESTIONS

Commissioner Buck – what is now left for this Commission on this IIFS issue, what items needs to be addressed?

Deputy Manuel – related to IIFS in Honokōhau, Honolulu and what’s being presented here is a measurable IIFS, we haven’t established one. The Commission dealt with the waste complaint which was focused on MLP’s diversions, abandonment and modification of others and are still working through those with MLP; but this is the first time we’ve talked about the IIFS in detail with that number that Ayrone presented to the Commission.

We’ve been doing this in two parts to get the Commission and community’s reaction and to opine, ask questions, and the ability for you to balance. Similar to Wai’oli, if there aren’t any concerns, we’ll bring this back to the Commission (for an action item) to recommend a measurable IIFS. We’re here to determine your comfortable as a collective and in this case DHHL has a potential non-potable demand in the region to address that simultaneously.

Chairperson Case thanked everyone for their time and appreciated everyone’s work and progress making collectively on water issues and particularly interim instream flow standards.

D. NEXT COMMISSION MEETINGS (TENTATIVE)

May 18, 2021 (Tuesday)

June 15, 2021 (Tuesday)

This meeting was adjourned at 3:54 p.m.

Respectfully submitted,

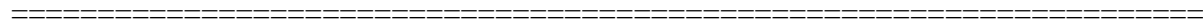
Rae Ann Hyatt

RAE ANN HYATT
Secretary

OLA I KA WAI:

M. KALEO MANUEL

M. KALEO MANUEL
Deputy Director



Written Testimonies Received:

NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY

An Authority of the State of Hawaii attached to the Department of Business, Economic Development & Tourism

73-4460 Queen Kaahumanu Hwy., #101, Kailua-Kona, Hawaii USA 96740-2637

Phone: (808) 327-9585 Fax: (808) 327-9586 Email: nelha@nelha.org Website:

<http://www.nelha.hawaii.gov>

Written Statement of **Gregory P. Barbour, Executive Director**
Natural Energy Laboratory of Hawaii Authority
before the **COMMISSION ON WATER RESOURCE MANAGEMENT**

in consideration of

Action Item B.2 – Natural Energy Laboratory of Hawaii Authority and Hawaii Housing Finance and Development Corporation APPLICATION FOR A WELL CONSTRUCTION PERMIT, Ota Well (Well No. 8-3957-006), TMK (3) 7-5-001:165, Lanihau 1-2, Moeauo Ahupua’a, Keauhou, Hawai’i.

The Natural Energy Laboratory of Hawaii Authority (NELHA) strongly supports the recommendation in the Staff Submittal to approve a well construction permit for the Ota well subject to the five special conditions therein. This well will provide freshwater for HHFDC’s affordable housing projects, DHHL’s initiatives to support the native Hawaiian community and NELHA’s efforts to develop clean and quality green jobs at the Hawaii Ocean and Science Technology Park for the residents of West Hawaii.

We began this project in 2015 and received funds from the Hawaii State Legislature in 2016 for this exploratory well. We were fortunate to develop a partnership with HHFDC and executed a contract with Water Resources International Inc in 2018 for their services to develop this exploratory well. We have spent considerable effort and time in completing all of the studies and assessments as required. We want to acknowledge the efforts of the Commission’s staff in arranging a series of “talk story” sessions over the past several months to allow members of the community to better understand the various perspectives. This has been very productive.

We believe that that the proposed exploratory well under consideration meets all of the existing statutory requirements, rulings and stipulations pertinent to its development, and that we have followed all of the rules and requirements and completed our work in a proper manner. Furthermore, in unilaterally requesting delays to the permit application review process, we intentionally paused the development process by over 2 years to allow various stakeholders to continue to discuss and come to greater consensus on issues surrounding water use and well development in North-Kona. We would like to move forward with this project and complete the exploratory well.

Thank you for the opportunity to offer these comments.

DAVID Y. IGE
GOVERNOR



DENISE ISERI-MATSUBARA
EXECUTIVE DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

IN REPLY REFER TO:
21: DEV/055

April 16, 2021

Chairperson Suzanne D. Case
Members of the Commission on Water Resource Management
State of Hawaii
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Dear Chair Case:

Subject: Application for a Well Construction Permit for Ota Well, State Well No. 8-3957-006
TMK (3) 7-5-001: 165, Keauhou, Island of Hawaii

The Hawaii Housing Finance and Development Corporation (HHFDC) would like to thank the Commission on Water Resource Management and its staff for their efforts in bringing the parties together to resolve the many complex issues relating to the development of Ota Well.

HHFDC supports the Application for a Well Construction Permit for Ota Well: State Well No. 8-3957-006 (Ota Well). Ota Well is being jointly developed by HHFDC and the Natural Energy Laboratory of Hawaii Authority (NELHA) and will enable affordable housing development at Kamakana Villages in North Kona.

HHFDC will participate in funding the proposed second symposium to build upon the Commission's 2018 Adaptive Management Symposium On Groundwater Dependent Ecosystems and tracer/isotope study as described in the staff recommendations so that more concrete adaptive management plan objectives and mitigative action can be developed.

The HHFDC respectfully requests approval of the Ota Well permit application. Should you have any questions, please contact Dean Minakami, Development Branch Chief, at 587-0518 or by email at dean.minakami@hawaii.gov.

Sincerely,

Francis Paul Keeno
Francis Paul Keeno
Executive Assistant

c: NELHA

**Department of Land and Natural Resources Aha Moku Advisory Committee State of Hawaii
Post Office Box 621 Honolulu, Hawaii 96809**

Hawaii State Aha Moku Testimony
To the Commission on Water Resource Management
For the meeting of the Commission on Water Resource Management

April 20, 2021

AGENDA ITEM: B2

Natural Energy Laboratory of Hawaii Authority and Hawaii Housing Finance and Development Corporation **APPLICATION FOR A WELL CONSTRUCTION PERMIT** Ota Well (Well No. 8-3957-006), TMK (3) 7-5-001:165, Lanihau 1-2, Moeauo Ahupua'a, Keauhou, Hawai'i

Aloha Chairperson Case and Honorable Members of Commission for Water Resource Management (CWRM),

On behalf of the Aha Moku participants and members of Native Hawaiian generational families connected to the ahupua'a that are part of the Keauhou Aquifer, we offer you the continued dialogue that impact the application for the Ota Well. The discussion is in relation to the application of the Natural Energy Laboratory of Hawaii Authority (NELHA), in collaboration with Hawaii Housing Finance and Development Corporation (HHFDC) who are proposing a new production well within the Lanihau Ahupua'a. If successful, the well will be dedicated to the Hawaii Department of Water Supply (HDWS). In order to fully understand and appreciate the importance of this issue to the indigenous people of Kona, it is important to recognize the protocols and symbiotic relationship between the people, their customary practices, and the natural resources – in this case, water, which is life and the ocean, which is also life.

The Hawaii State Aha Moku (Aha Moku), via Act 288, SLH 2012 brings the voices of the native Hawaiian generational and lineal descendants forward to the Hawaii State government in issues that impact their traditional and customary practices within natural and cultural resources. Working within a traditional resource sustainability process restored from the 9th century through translations of ancient chants and mo'olelo, the Aha Moku focuses on three main principles:

- Malama Ke Akua (Honor God)
- Malama I Ka'āina (Honor the Land)
- Malama Na Iwi Hanau O Ka 'āina (Honor the people of the land)

These three principles are critical to the testimonies and generational knowledge of the native Hawaiians who continue to practice customary beliefs within their ahupua'a, and in this case, in the ocean fronting the OTA well in the Puapua'a Ahupua'a (Lanihau) in Kailua-Kona. The people are comprised of their beliefs and are themselves an integral part of the natural resources and cannot be separated from them because the Akua, the land and the people are one. They are the whole entity and not separate compartments. This belief system is often not comprehended within the western thought process, yet it is the core of Hawaii State constitutional protection of the traditional and customary practices (TCP) of Hawaii.

Background

On December 15, 2020, the application for the OTA Well was brought before CWRM and the Aha Moku response outlined the complexities and issues attached to this request. All the principal partners to this request offered absorbing reasons of why the OTA Construction Permit should be approved.

The Natural Energy Laboratory of Hawaii Authority (NELHA), in collaboration with the Hawaii Housing Finance and Development Corporation (HHFDC) proposed this new well in the higher level of the Keauhou Aquifer System Area (KASA) for potable water. This drinking water would be used for NELHA's technology park and for the future Kamakana Village development with low income housing. If all goes satisfactory, then the well will be connected to the County distribution network and everything will be transferred to the Hawaii Department of Water Supply (HDWS). However, without knowing the scope of the Kamakana Village, how will we know how much water will be taken to support it?

The generational practitioners of Lanihau are aware of this process and as they are also life-long residents of Kona, understand the need for water and development to provide for the needs of the people.

Continuing Dialogue since December 2020, the extended ‘ohana within the Keauhou Aquifer and outside of it have been meeting to discuss the concerns stated in December 2020:

- • How much water from the Keauhou Aquifer is the Ota Well going to draw? ○ Answer continues to be the same as stated in December 2020 – “Our understanding of the Ota Well is that the sustainable yield for the Keauhou Aquifer System Area is intended to account for 44% of natural recharge so that 56% of recharge continues to discharge along the coast. That should mean that the amount of fresh water that naturally discharges along the Kona coast should continue to be sustainable for the present and near future.”
- ○ We now know that the ground water that discharges into the deeper ocean most likely comes from the higher altitude watersheds so higher placed monitor wells are important for better data.
- How much discharge water is needed to protect traditional and customary practices in Lanihau? In the other ahupua’a connected to the Keauhou Aquifer boundaries?
- CWRM staff continues to educate traditional practitioners on the upper level well purposes.
- What about the need for water on the coastline to promote and protect traditional cultural practices and existing coastal wahi pana? ○ While these coastal areas are connected to the aquifer, we now know that the sources of the water are dependent more on tidal changes and surface ground water sources.

Recommendation of Aha Moku

While meetings were held with practitioners of Kohanaiki, Kaloko, Honokohau and Kealakehe, it was also understood that these ahupua’a were part of the larger Hualalai Aquifer Sector Area and possible informational meetings would be held in the future with CWRM. However, lawai’a from other ahupua’a within the Keauhou Aquifer, but not specifically from the Puapua’a Ahupua’a (Lanihau) also participated in the discussions held between January and March 2021.

The Kupuna of the traditional and generational lawai’a families of Lanihau met in person on April 10, 2021. Their reflections and mana’o is included in the staff submittal (page 11). They feel very strongly that Symposium 2 be conducted in person as soon as safely possible to:

- Identify critical traditional and customary ocean, coastal and near-shore practices within the Keauhou Aquifer to include practitioners of wetlands, and other traditional disciplines associated with fresh water discharge;
- Discussion of a process of how ocean and coastal traditional practices can be perpetually maintained through the adequate discharge of ground water into the ocean;
- Discussion of development of a state and county process where ground-water dependent ecosystems and the traditional and customary practices dependent upon them, including those of off-shore practices can be sustained;
- Invitation should include all stakeholders: Generational ‘Ohana of Ahupua’a impacted by the Keauhou Aquifer, CWRM: Commissioners, staff; Hawaii County DWS, Environmental groups, NH organizations, DHHL, Kamehameha Schools (due to their coastal holdings in Keauhou and maintenance of three heiau in the ocean), Kaloko-Honokohau National Park, NOAA, NELHA, HHFDC and whoever else CWRM wishes.

Note: this Symposium, if approved, should take place whether this application is approved or not once the Covid-19 restrictions are eased enough where a meeting such as this – which should be in person (Hawaiians do not do well on virtual meetings) can safely take place.

We deeply appreciate the opportunity to bring the voices of the generational families of the ahupua'a connected to the Keauhou Aquifer District to the attention of the Water Commission so their mana'o can be heard relative to traditional and customary practices that may be impacted by the Ota Well application. We continue to learn the scope of this application, yet the impacts that could be suffered by the native Hawaiian generational practitioners of tradition and customary practices if this application is approved is still apparent. However, we also have trust in the Water Commission to make the right and pono decision.

Respectfully and humbly yours,

Kawaikapuokalani K. Hewett, Ka Mea Ho'okumu, Founder, Hawaii State Aha Moku

Rocky Leialoha Kaluhiwa, Kahu Nui, Aha Moku Advisory Committee, Hawaii State Aha Moku

Leimana DaMate, Luna Alaka'i, Hawaii State Aha Moku

Jerome Kanuha, Kupuna, Puapua'a Ahupua'a, Lanihau (Spokesperson for the Extended Kanuha 'Ohana of Lanihau)

DAVID Y. IGE
GOVERNOR
STATE OF HAWAII



WILLIAM J. AILA, JR.
CHAIRMAN
HAWAIIAN HOMES COMMISSION

JOSH GREEN
LIE GOVERNOR
STATE OF HAWAII

TYLER I. GOMES
DEPUTY TO THE CHAIRMAN

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

P. O. BOX 1879
HONOLULU, HAWAII 96805

April 19, 2021

TESTIMONY

TO: Suzanne D. Case, Chairperson
Commission on Water Resource Management (CWRM)

FROM: William Aila Jr., Chairman *W. Aila*
Hawaiian Homes Commission

VIA: Email to dlnr.cwrn@hawaii.gov

SUBJECT: DHHL CCOMMENTS ON CWRM AGENDA ITEM B2 NELHA AND HHFDC
APPLICATION FOR A WELL CONSTRUCTION PERMIT OTA WELL

The Department of Hawaiian Home Lands (DHHL) has reviewed the Agenda Item B-2. DHHL is encouraged that CWRM staff have made good faith efforts to find a reasonable compromise amongst all parties. Water allocated from this well to DHHL will be utilized to provide water to the remaining homestead lots in Village 4 Laiopua Phase 2 Hema development. DHHL's Laiopua Phase 2 Hema development consists of 125 residential lots. Without water from the Ota Well, DHHL would only be able to award approximately 100 of the 125 lots. The lack of available water on the County DWS system is the sole reason why DHHL would not be able to award all lots in Phase II in a timely manner. Development of the Ota Well is critical to providing more residential homestead opportunities to DHHL beneficiaries.

DHHL also looks forward to participating in future quarterly meetings on this matter with all parties as discussed in the submittal.

DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAI'I
345 KEKUANAQA STREET, SUITE 20 HILO, HAWAII 96720
TELEPHONE (808) 961-8050 FAX (808) 961-8657

April 19, 2021

Ms. Suzanne Case, Chairperson

Mr. Kaleo Manuel, Deputy Director

State of Hawai'i

Department of Land and Natural Resources

Commission on Water Resource Management

Dear Ms. Case and Mr. Manuel:

Subject: Well Construction Permit Application Ota Well (Well No. 8-3957-006), Tax Map Key (3) 7-5-001:165

The Department of Water Supply, County of Hawai'i (HDWS), has participated in several on-line meetings (most recently, January 29, 2021, February 17, 2021, and March 19, 2021) regarding the subject Well Construction Permit application and would like to provide the following comments in regard to the staff submittal "B-2" for the April 20, 2021, Water Commission Agenda:

1. HDWS cannot accept limitation on pumping as proposed by the National Park Service.

The intent of developing the high-level, high-quality sources is to reduce the pumping of the basal sources. This, in turn, will provide customers with better quality water as well as reduce impacts to basal discharge at the coast. It should also be noted that in Appendix F of the 2019 Water Resource Protection Plan (WRPP), more recent studies show that the calculated sustainable yield for the Keauhou Aquifer System Area is significantly higher, at 80 million gallons per day (mgd); however, the more conservative 38-mgd sustainable yield is still being used.

The 2019 WRPP, Appendix F, also states that calculation of sustainable yield was a function of water levels. For water levels greater than 26 feet (which represents high-level sources in the Keauhou Aquifer System area), sustainable yield should be calculated at 75% of recharge; however, this is not being considered for pumping in this aquifer. HDWS does not object to the conservative approach but feels it is necessary to point this out to show that the Commission on Water Resource Management (CWRM) staff is being very cautious in terms of protecting the resources.

2. HDWS did not participate in the discussions or review of the Memorandum of Understanding regarding the Department of Hawaiian Home Lands' (DHHL) allocation from the Ota Well.

HDWS supports this effort; however, it should be pointed out that HDWS will limit the well capacity to approximately 700 gallons per minute (gpm) and does not recognize partial or fractions of an equivalent unit. Therefore, it should be clarified that DHHL should receive either 30 or 31 equivalent units. It should also be noted that these conditions should be subject to a successful completion and testing (quantity and quality) of the subject well and that no special conditions that would impair 1-IDWS' ability to serve the community are included with the Pump Installation Permit.

3. HDWS does not object to the proposed Symposium 2 that would be primarily focused on gathering information on impact to traditional and customary practices and resources along the coastline and ocean; however, this should also include the impacts of invasive species, as well as sea-

level rise, and not just the impacts of pumping. HDWS feels that these subjects could have a much greater impact than groundwater withdrawals, especially from the high-level sources as well as the deep, confined fresh water resource.

4. HDWS supports the proposed monitoring efforts during the pump test and agrees to coordination efforts in monitoring nearby HDWS sources, as well as the HDWS funded and recently completed monitoring well, directly above the Kaloko-Honokohau National Historic Park.

We thank you for this opportunity to comment on the subject matter. Should you have any questions, please feel free to contact Mr. Kurt Inaba of our staff at (808) 961-8070, ext. 238.

Sincerely yours,

Keith K. Okamoto, P.E.
Manager-Chief Engineer

April 20, 2021

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

Re: Agenda Item C3: Informational Briefing Regarding the Amended Interim Instream Flow Standard for Wai'oli Stream, Halele'a, North Kaua'i

Aloha Chair Case and Members of the Commission on Water Resource Management,

My name is Reid Yoshida, and I write to you as both a taro farmer and the President of the Wai'oli Valley Taro Hui. I am grateful for Ayrón's hard work and the rest of your staff's support in getting us here. The Hui **strongly supports this amended Interim Instream Flow Standard (IIFS) of 50% of the flow (4mgd at the Q90)**, and humbly requests that you **adopt it** in May. As a Hui, it is our mission to support and enhance the biocultural resources of the Hanalei Kalana, traditionally comprised of Hanalei, Wai'oli, Waipā, and Waikoko; to protect the natural and cultural resources that enable traditional and customary Native Hawaiian practices; to maintain habitat for endangered Hawaiian waterbirds; and to engage the greater Kaua'i community through educational outreach programs and initiatives relating to taro farming and community-based stewardship of water resources.

The law students call our Hui a legal unicorn because uses like ours have become rare in this day and age. Our farmers continue the centuries-old **instream use** of routing fresh, flowing water from Wai'oli Stream through our lo'i and back into Wai'oli Stream and Hanalei River. This Hui and our ancestors have stewarded Wai'oli Stream and the greater Hanalei Kalana for four to six generations or more – long before there was a State of Hawai'i, conservation district, or interim instream flow standards. For example, my family has been in Hanalei for 125 years. My great grandfather came to Kaua'i to work on the plantations and settled here in the late 1800s. My grandfather was born in Hanalei in 1896, and I am fortunate enough to live in the same home that he built in 1933. In the 1920s, he started raising rice and then slowly started to plant taro as a supplemental crop in the 1940s. By the 1950s, due to the competitive rice prices in California, he left that crop and focused on taro. For years to follow, my grandfather continued to farm until my uncle eventually took over.

Growing up, I split my time between O‘ahu where I went to school, and Hanalei where I spent my summer/spring breaks, long weekends, and holidays. We worked the farm whenever I was in Hanalei. When my friends were out playing sports and going to the beach, we were pulling grass, planting huli, or using the tiller to prep the fields. After graduating from high school, I went to college in California. I received my degree in Engineering and spent seventeen years as an engineer/project manager for a few different contractors here in Hawai‘i and on the mainland. During those years, I always returned home to Kaua‘i to work in the lo‘i and help my family. I didn’t take vacations during my professional career to travel; instead, I came home to help work in the lo‘i. In 2010, I decided to leave my career as an engineer to move home to Hanalei. Over the next few years, I helped my uncle on his farm and some of my friends who were also taro farmers. In 2015, I was fortunate enough to secure a 6 acre lease which enabled me to build my own farm and continue to farm today. Many people have questioned my decision to walk away from my career as an engineer to farm taro, but I did it because it is gratifying, because I am able to farm on the same land that my grandfather did, and this gives me pride in what I do. I am carrying on my grandfather’s legacy, and I am committed to ensuring that it won’t end with me.

Although our farming community has always been close, we did not formally organize as a non-profit until the devastating 2018 floods made it painfully clear that our entire community and way of life was at risk. Our lo‘i kalo irrigation system sustained major damage, completely cutting off our water supply. In addition, disaster recovery efforts revealed that our māno was on conservation land, which triggered a host of permits, exemptions, and other requirements. We have worked closely with Ian Hirokawa and others and were grateful when the Land Board approved a right of entry and perpetual easement for our lo‘i kalo irrigation system, and a revocable permit for our water use. But, a long-term water lease has remained elusive, and this IIFS is a necessary step in that process. While permitting has progressed, flood recovery has been challenging. Major damage to our system has made our water supply inconsistent, and severe weather events in the Fall of 2020 and Spring of 2021 leveled repairs to our irrigation system made by the County of Kaua‘i in 2020. This damage has created a lot of stress and left many of us wondering if there is a future in taro farming for us. In fact, I’ve had to go back to my career as an engineer for a contractor on Kaua‘i. This was not my plan or wish, but I had to financially support my family as my farm is relatively small, and my production was down about 40% compared to pre-flood conditions until 2019 (it has finally started to come back over the last few years). I continue to work the farm on a part-time basis with the hope that I can return to farming full-time when our water system is fully repaired.

In addition to the physical devastation, the 2018 flood has forced our Hui to navigate a legal maze to continue to care for resources that our families have stewarded for centuries. Though it’s been hard, we’ve learned so much through this process. We are grateful that the people of Hawai‘i value our traditional taro cultivation as a **protected public trust purpose** under the State Constitution and Water Code. Members of our Hui have **appurtenant, riparian, and traditional and customary Native Hawaiian rights**. After the four to six generations that our Hui has been farming together, we have this down to a science. Our uses are reasonable and beneficial because we have to be exceedingly efficient in order for our dozen or so farmers to have enough water to cultivate the 80 or so acres of lo‘i that we steward. We have dutifully complied with all of the legal requirements imposed since the 2018 floods, but it’s been a lot.

Appearing on your Commission’s agenda gives us hope that at some point we will be done with

these legal processes so we can focus on rebuilding our irrigation system and farms. Ayrón's amended IIFS is appropriate for a number of reasons. It is consistent with Native Hawaiians' historical diversion of not more than 50% of a stream's flow, and this traditional approach is perfect for our traditional use. Back in the 1980s, our members **declared their uses with the Water Commission**, and the Commission verified total water use of about 13.5 mgd.

Our Hui is still in basic recovery mode because of the flooding, but we are working towards getting back to that capacity eventually. Like our ancestors, we adaptively steward our resources, so we look forward to continuing to work with Ayrón if adjustments are necessary.

The amended IIFS is an important step in the process, but we still have a long way to go. Once the amended IIFS is set, we can submit our Draft Environmental Assessment for a long term water lease. Amending the IIFS will allow my family, as well as many other families, to continue raising taro. Some claim the future is bleak for taro farming, but your staff submittal gives us hope. It is my hope that when I am at the point where I can no longer physically continue to farm, there will be a new generation that will want to continue. Having the right to continue to use and maintain the system our ancestors stewarded for centuries will ensure that future generations have the opportunity to raise taro and enjoy the same incredible opportunity that I have. Mahalo again for this chance to testify and please vote to adopt the proposed IIFS in May. Mahalo,
Reid Yoshida
President, Wai'oli Valley Taro Hui

Aloha Chair Case and Members of the Commission on Water Resource Management,

My name is Kimo Inanod and I am a kalo farmer in Wai'oli Valley. I am also the Vice President of the Wai'oli Valley Taro Hui. Mahalo for considering the amended Interim Instream Flow Standard (IIFS) so that we may continue to steward our ancient lo'i kalo system. Like many others in our hui, my family has been farming kalo and taking care of Wai'oli's natural and cultural resources since before I was born. I am a fourth generation Native Hawaiian kalo farmer;

I cultivate one kuleana that my family owns and about seven acres that I lease from Wai'oli Corporation. Because of this, I also help to mālama Wai'oli Stream and the larger watershed. As a hui of small family farmers, we take pride in stewarding these life-giving resources. I was raised by my grandpa, James Masada, right here in Wai'oli. Over thirty years ago, in May 1989, my grandpa and I submitted declarations of our water use with your Commission. In 1993, your Commission verified our water uses from the same mānowai, po'owai, and 'auwai that we use today. In addition to farming kalo, I am also an avid hunter, and regularly access the ma uka reaches of our watershed to exercise my traditional and customary Native Hawaiian rights and practices. Because of this, I am keenly familiar with this 'āina and feel an obligation to ensure responsible use of this land and its resources.

For me, and so many others, our work is about restoring and continuing our way of life as Native Hawaiian practitioners and small family farmers. Kaua'i's North Shore has changed dramatically during my life, and our sleepy farming community has been transformed into a bustling tourist destination and construction zone. Amending the IIFS for Wai'oli Stream is a vital step in protecting both our stream and the cultural practices dependent upon it, including the Hui's kalo cultivation. While it won't resolve all our issues, it provides some assurance that our culture and

way of life in this kalana get chance for our children and the generations yet to come. While we still have a long road to recovery, our community is resilient and committed to this work. My ‘ohana and I support the amended IIFS for Wai‘oli Stream and ask that you adopt it in May to help us continue this way of life that has shaped our ‘ohana and larger community for generations.

Mahalo piha,

C. Kimo Inanod

Vice President, Wai‘oli Valley Taro Hui

Aloha Chair Case and Members of the Commission on Water Resource Management,

My name is JoAnne Kaona and I was born and raised on Kaua‘i. I grew up in Wai‘oli, and come before you as a fourth-generation Native Hawaiian kalo farmer.

Mahalo nui for the opportunity to testify in strong support of this matter, which is of great importance to my ‘ohana, and mahalo to Ayron for going out of his way to work with us in Wai‘oli Valley to set a numeric IIFS. I am a kalo farmer in Wai‘oli Valley, and also serve as the Secretary as well as a Board Member of the Wai‘oli Valley Taro Hui.

My father, Clarence “Shorty” Kaona, has had primary responsibility for our family kuleana along with a handful of other small parcels for about 33 years. As one of five children, I am the only one who helps my Dad mālama our lo‘i. For me, kalo farming defines our ‘ohana; it is what we do. My Dad took over this kalo farm from his father in 1987. In 1989, he filed a Declaration of Water Use for our appurtenant and traditional and customary Native Hawaiian rights and practices in Wai‘oli. My twin brother and I grew up on our small family farm and were blessed to have been afforded a lifestyle that allowed us to know and enjoy the amenities of our ‘āina.

Unfortunately, these amenities are not as plentiful anymore. Since the 2018 floods devastated our ‘āina – our lo‘i kalo, manōwai, po‘owai, and entire ‘auwai system – things are just not the same. A year after the floods, for the first time in my father’s 75 years of farming, he was not able to produce any kalo. This was due to many factors, including water shortages due to the damaged mānowai and ‘auwai, equipment that was ruined by the floods, and debris and silt clogs in our lo‘i. Despite all of our work to carefully steward and mālama our ‘āina for multiple generations, we now have tons of legal kuleana to ‘auamo, in addition to the physical restoration our farms require. Farming kalo is my kuleana, it is an opportunity to feed my community, as well as my own spirit;

I enjoy helping my father farm and have a deep appreciation for it as something that we share. Even in his 80s, my father still works hard as a taro farmer and I know that the kuleana will fall upon me to ‘auamo when he is no longer able. After four generations of kalo farming, it would be impossible for me to turn away from this traditional practice that has been with my ‘ohana forever. In fact, there is no other alternative for me but to be a kalo farmer, just like my Dad before me and his father before him.

Kalo farming teaches us how to act, how to mālama our ‘āina, these lessons are blessings that I was lucky enough to experience growing up. I see the kids that I work with every day and they are consumed with technology, with little opportunity to experience our ‘āina like I did when I was their age. In my work at the Waipā Foundation, a nonprofit in the neighboring ahupua‘a, I work with keiki and teach them about aloha ‘āina, sustainability, natural resource management,

and how all of these are part of our traditional and customary Native Hawaiian practices. I see it as an opportunity for me to instill a sense of kuleana in this younger generation to take the teachings of our kūpuna and apply them to our practices today.

A mission of the Waipā Foundation is to create a healthier community by educating our people about the benefits of an Indigenous diet while also keeping it affordable. One way to maintain this is by ensuring that our community has local kalo and poi to eat. The Waipā Foundation gets 70% to 90% of our kalo from the Wai‘oli farmers, including my Dad. The Foundation processes that kalo and poi at our certified kitchen with volunteer labor and provides pa‘i‘ai for our community, at or below cost. For example, Waipā’s pa‘i‘ai price for kūpuna is variable, but can be one or two dollars per pound; or even free for kūpuna who cannot afford it.

In the greater scheme of things, I see my own kuleana as helping to sustain a healthy lifestyle for our entire community, from keiki to kūpuna. We in Hanalei, and more particularly the farmers in Wai‘oli, have been blessed to be able to farm kalo on ‘āina that has been stewarded in this same way for many, many hundreds of years. The ‘āina is well-suited for wetland kalo cultivation and the ‘ohana who have been farming for multiple generations, like mine, have taken on this kuleana to ensure accessibility to our lāhui’s most basic and essential food. This kuleana is a heavy burden to carry at any time, but even more so when our access to water needs is uncertain. So, we are asking for your kōkua to allow farmers like me to continue feeding our communities. So much of our Hanalei is not the same anymore; I don’t recognize the same safe community that I grew up knowing, and often I feel frustrated because our town has become so crazy and inundated with faces that are not kama‘āina. The shops and restaurants that cater to tourists sit across the road from the illustrious lo‘i kalo, which give our Wai‘oli its joyful name. In light of all of these changes, I come here today with my fellow farmers humbly requesting that this Commission ensure that the amended IIFS provide enough water for us to maintain our traditional and customary practices, which have been passed down from our ancestors, to our kūpuna, to us.

As Native Hawaiian cultural practitioners, we steward this ‘āina in the same way that our ancestors did, preserving some small part of our Hanalei. We respectfully ask that this Commission adopt the proposed IIFS of 4 mgd for Wai‘oli Stream, which we believe will enable us to continue our cultural practices as Native Hawaiian kalo farmers, and eventually pass them on to future generations as well. I will be at the meeting via Zoom and am happy to answer any questions you may have.

Me ka ‘oia‘i‘o,

JoAnne Kaona

Secretary, Wai‘oli Valley Taro Hui

Aloha Chair Case and Members of the Commission on Water Resource Management,

My name is Clarence “Shorty” Kaona. I am a third generation kalo farmer in Wai‘oli Valley, 100% Native Hawaiian, and a member of the Wai‘oli Valley Taro Hui. Mahalo for this opportunity to testify in support of the amended Interim Instream Flow Standard (IIFS) for Wai‘oli Stream.

I have been farming the same kuleana land since I was six years old. My Grandfather started farming kalo in Hanalei Valley in the 1930s. When he passed away, my Dad took over. In the

1940s, my Dad acquired land in Wai‘oli Valley. This is the same kuleana land that I continue to farm, and that my daughter, JoAnne Kaona, will mālama after me, and the same land that will pass to future generations of our family. When we were kids, we would walk to the kalo patch to work every day. We were tasked with weeding, tilling, planting, and any other work my Mom and Dad needed. I think back to those days fondly. We would make poi every week with a model A Ford engine that my Dad hooked up to our grinder. We would share this with our ‘ohana and friends in the community. As long as I can remember, we always had a bowl of poi on the table.

From grade school and through high school, my brothers, sisters, and I spent countless hours in the lo‘i. This was both a routine for us and our cultural practice as an ‘ohana. I am grateful for this experience, as it taught me many lessons and ultimately shaped my values. I learned to work hard, be diligent, and be one one with nature. Everything in our environment, us humans included, has an impact on the kalo’s growth.

Because our hui has always shared one ‘auwai system, we are responsible, and our water use is reasonable and beneficial. Otherwise, our farms and families would not have survived. For many of us in the hui, our families have been working together for multiple generations. Stewarding this ‘āina from a young age taught me the value of our native culture and the importance of ‘ohana. I lived in California for some time, but when my Dad passed away in 1986 I moved back to Kaua‘i and have been farming kalo in Wai‘oli Valley full-time ever since. I knew that no one else would step up to this responsibility, and I really wanted to honor my Dad’s legacy and continue to farm kalo. I hope to pass down the lessons I learned in the lo‘i to my children and the generations to come.

My family has been in Wai‘oli for many years, and I work hard to continue our traditional and customary Native Hawaiian practice of wetland kalo cultivation. Since the devastating floods in 2018, it has been even harder to continue. I currently farm about three acres of kalo, which is less than our normal, pre-flood acreage. In all of my years here in Wai‘oli, I have never seen a flood like that. The damage was devastating. It ruined my equipment and tools, most of the banks that border my patches, and the ‘auwai. Over the last three years, we have made some progress; but in some ways, the real restoration has yet to begin. Our hui regularly maintains the mānowai, po‘owai, ‘auwai, and other areas along our lo‘i kalo irrigation system. This cleaning ensures that our uses are efficient, but also supports ma uka to ma kai stream flow, a healthy watershed, and helps to prevent flooding. This work is important not only for our hui’s farms, but also for the larger Wai‘oli and Hanalei communities. As you know, water is integral to lo‘i kalo cultivation, and we are hopeful that an amended IIFS for Wai‘oli Stream will support both our stream and continued kalo cultivation.

We support the proposed IIFS for Wai‘oli Stream and the important protections it provides for our resources. It will also enable us to continue farming so that our traditional and customary practices, knowledge, and lessons, can be passed on to future generations. The recovery efforts and legal requirements have been really hard, but this amended IIFS gives me hope that the younger generations will be able to continue kalo farming in Wai‘oli. This knowledge and other lessons can only be gained through the hard work and love that comes from spending time in the lo‘i.

Mahalo for the opportunity to testify in strong support of this issue, which is of vital importance to my ‘ohana and our larger community. Please adopt the numeric IIFS for Wai‘oli Stream in May, and help us keep our cultural practices alive in Wai‘oli. Mahalo nui, Clarence “Shorty” Kaona

Aloha Chair Case and Members of the Commission on Water Resource Management,

My name is Bobby Watari and I am the Treasurer of the Wai‘oli Valley Taro Hui. Mahalo for the opportunity to testify in support of the amended Interim Instream Flow Standard (IIFS) for Wai‘oli Stream. I would also like to thank both the Commission and Ayrton Strauch for working with the Hui on this important issue. We understand how critical this work is and are honored by the time and attention you have given to Wai‘oli and our families.

I am a 3rd generation taro farmer who has been farming full-time for the past 40 years. Farming kalo is my life’s work and passion. I learned to farm from my father, who moved to Hanalei in the 1950s to grow taro and I now steward the same lo‘i that was my first classroom. I farm the kuleana land that my family owns and I also lease from Wai‘oli Corporation.

My wife Lillian and I are now grooming my step-son, Kaisen Carrillo, and our daughter Lily to take over. It feels like I am working constantly to ensure that our farm is operational and healthy so that my kids have the option of continuing this important family tradition. Unfortunately, this has been a struggle. Farming is so much more than planting and harvesting. We work hard to maintain the land for taro. This includes monitoring and maintaining Wai‘oli Stream and the lo‘i kalo system that has been in place long before I started farming. In Wai‘oli, we use a traditional Hawaiian irrigation system that has been operating since the 1500s. It is hard work, but we are honored to be a part of the handful of farmers who continue this important practice — one that has been our way of life in Wai‘oli for hundreds of years. We feed our community by supplying this staple to small nonprofits like the Waipā Foundation and others throughout Hawai‘i. My step-son Kaisen also provides lū‘au leaf so local families can make laulau and other Hawaiian food.

Restoring and maintaining our existing lo‘i kalo system is so critical — not only for my family’s livelihood and the livelihood of the other farmers — but also to perpetuate a practice integral to our community’s identity. We use a mānowai, a traditional, Native Hawaiian breakaway dam, to take some water from Wai‘oli Stream. That water flows through our ‘auwai (ditches), then into our taro patches, then back to either Wai‘oli Stream or the lower reaches of Hanalei River. Like other taro farmers, we need throughflow — water flowing through our taro patches — but we don’t “consume” water like most offstream users because it goes back to the stream. All of our use is within the watershed where our water supply originates. So, the water that runs through our patches eventually goes back to feed our water cycle in Wai‘oli Stream and Hanalei Kalana.

For these reasons, instream, in-watershed cultivation of kalo in a traditional manner (like ours) has earned special protection and respect under our State Constitution and laws.

The way we steward our system is unique in that it perpetuates a centuries-old Native Hawaiian cultural tradition that is place-based and resource-specific. Our families have stewarded these resources long before there was a State of Hawai‘i, conservation district, or interim instream flow standards. We know this stream well, and Ayrton’s proposed IIFS is appropriate for our situation. Historically, Native Hawaiians diverted up to 50% of a stream’s flow. So, this Native Hawaiian approach is appropriate for our Native Hawaiian cultural use of kalo cultivation. The irony of our situation is that, although we have been stewards of this area and its resources for hundreds of years, due to the devastation and repairs related to the 2018 floods, we now have to

navigate this complex maze of legal requirements. Throughout it all, we have and will continue to dutifully comply with the various requirements. As you well know, our uses are protected public trust purposes. We have appurtenant, riparian, and traditional and customary Native Hawaiian rights. My 'ohana declared our uses with the Water Commission back in the 1980s and the Commission verified them.

April 2021 marks three years since one of the most devastating floods in recent memory. Although much has been done, we still have more work to do. We continue to struggle with damage from severe weather events. Though our māno was repaired in the August 2020, it was leveled again in the fall. The number and severity of weather events continue to increase. In fact, last month, my wife and I were caught in a flash flood, which completely overtook our farm in less than 10 minutes. We desperately need to finish the legal permitting so we can focus on rebuilding our irrigation system and farms.

For the first time in my life, I have had to face the harsh reality of many of my fields remaining unplanted. Prior to the 2018 floods, I had never seen so many of my fields empty. It has taken a toll on me personally and on our family. We enjoy, and are proud of, being able to farm as family. The vision I have of farming this land with my wife, Lillian, step-son, Kaisen, and our daughter Lily gives me the strength needed to continue during these difficult times. Knowing that in the future our 'ohana will continue to have access to water from Wai'oli Stream gives me hope that they will be able to continue our family tradition of farming taro.

Mahalo for considering my testimony and for your ongoing work to protect our valuable natural resources and the traditional practices upon which they depend. We humbly ask for your support of the amended IIFS in May.

Mahalo nui,
Robert "Bobby" Watari
Treasurer, Wai'oli Valley Taro Hui

Aloha Chair Case and Members of the Commission on Water Resource Management,

My name is Lillian Watari and I am a 4th generation Native Hawaiian kalo farmer. I have been farming for 45 years. Our 'ohana started farming kalo in Lumaha'i with my great-grandfather Saburo Harada. My grandfather Genichi Harada then moved the farm to Wainiha, and the tradition continued with my mother and father who still farm in Wai'oli Valley at 74 and 85 years old respectively. I am married to Bobby Watari and we are proud to work with our son, Kaisen Carrillo.

Kalo farming is more than a longstanding custom and tradition in our family, it's our way of life and our family legacy. Growing up, I was the eldest of 5 children. As soon as we were physically able, we were out in the lo'i helping our parents and grandparents maintain and cultivate kalo. At such a young age, I didn't understand the commitment necessary to farm kalo. It felt like a burden. Our lives revolved around the kalo's needs. Our routine consisted of coming home after school, having just enough time to grab a quick snack, and loading up the truck to head down to the lo'i. Looking back now, this is a testament to our community's commitment to farming and the natural resources upon which we all depend. I also realize the value of the lessons I learned working in the lo'i. I am proud of my family's tradition of farming kalo and the person it has made me. It taught me the value of hard work and the importance of being able to spend time

with nature.

I currently work full-time at a hotel. Yet, even now, I look forward to the weekends and being able to go to the lo'i and have the opportunity to be there with my family. It gives me the peace of mind that is often hard to find in today's complex world. It's hard work, but I enjoy it and wouldn't trade it for anything. It's beautiful to continue the legacy built by my grandparents and to pass that on to my children and, hopefully, my grandchildren.

As I understand it, setting an IIFS for Wai'oli Stream of 4mgd would both protect the stream, and enable our Hui to continue our Native Hawaiian traditional and customary practice of kalo cultivation. It has been hard since the floods almost three years ago, both emotionally and in terms of our kalo production. Our family farm may have been hit the hardest because of where our lo'i are situated in relation to the floodwaters. For the first time in our lives, our farm was left with many empty fields for a number of reasons, including a decrease in water flow. Yet, we are resilient and will persevere. We are still here. We just want to be able to get back on our feet and continue to practice the culture we love in our small community. The North Shore of Kaua'i has changed so much over the years. Yet, I can say that our identity as a community is grounded in kalo farming. It is a true testament to our community that we work together and help each other get through challenges like this. We are proud of who we are and what we do, and hope to continue to pass down this tradition to future generations.

Last, I would like to thank Ayron and the Commissioners for all your time, consideration, and efforts. We are one of many communities in need of a numeric IIFS. Though it is hard work, we hope to set an example for others. Please vote to approve the staff recommendation and Ayron's numeric IIFS in May. We look forward to continuing to work with you all to steward our natural and cultural resources.

Mahalo,
Lillian Watari

Aloha Chair Case and Members of the Commission on Water Resource Management,

Mahalo for taking the time to consider an amended Interim Instream Flow Standard (IIFS) for Wai'oli Stream and our humble Wai'oli Valley Taro Hui. We'd also like to mahalo your staff for their tireless and vigilant efforts, especially Ayron. A numeric IIFS as your staff has proposed would actualize important natural resource protections and would help to provide certainty around water flow for our hui. This would help us continue to cultivate this important crop that feeds our 'ohana and community.

My name is Kaisen Carrillo and I come from multiple generations of kalo farmers on both sides of my 'ohana. My mother's side of the family, the Haradas, started farming with my great-great-grandfather, Saburo Harada, in Lumaha'i. My great-grandfather, Genichi Harada, eventually moved the farm to Wai'oli and my 'ohana has been farming in the valley ever since.

My great grandfather's daughter, my grandma Lily, married Ahfook Tai Hook and both of them still farm in Wai'oli at 74 and 85 years old. Finally, my mom Lillian, daughter of Ahfook, married Bobby Watari, who also farms in Wai'oli Valley. That leaves me, a 29-year-old 5th generation Native Hawaiian kalo farmer in Wai'oli Valley. I am one of only three farmers in Wai'oli younger than 35-years-old. I have started my own family and am raising my 4-year-old

daughter and 1-year-old son to farm this land as well. With your support, they will be 6th generation Wai‘oli kalo farmers.

I spent some time outside of Kaua‘i, going to school, earning my associate’s degree in hospitality and my bachelor’s degree in business. I’m grateful to have these degrees and have been putting them to good use since I moved back to Kaua‘i. Now, as an adult, I am able to use my formal education to expand my own farming efforts and am currently being groomed to run our family farm someday.

Since the 2018 floods, though, things have really been hard. As a full-time farmer with a young family, it’s been stressful trying to figure out how to provide for my family. I need to not only repair the damage to our farm, but also provide for my growing family’s needs. At the same time, I have been trying to engage more in the administrative aspects of farming by working with our Hui to learn about the issues unique to Wai‘oli kalo farmers. These include securing a perpetual easement and revocable permit from BLNR, applying for a long-term water lease, and now, working to set a numeric IIFS with this Commission. I am committed to these issues because I know this will make it possible for my children to farm, just as my kūpuna did all they could to pave the way for me to continue farming. One of the most important reasons for adopting the proposed IIFS is because farming kalo differs from most other uses. As you know, our traditional, Native Hawaiian methods of kalo cultivation rely on “throughflow.” Water from the stream flows into our lo‘i then returns to Wai‘oli Stream and Hanalei River. So, it’s not consumptive or polluting, and all use is within the same watershed. Additionally, understanding the importance of water resources, Kānaka Maoli have historically diverted up to 50% of a stream’s flow. This approach is particularly appropriate for the traditional and cultural practice of farming kalo – especially in Wai‘oli where our hui has farmed for generations. Last, our use of the stream is a protected public trust purpose.

In addition to Native Hawaiian T&C rights, we also have appurtenant and riparian rights. From my understanding, farmers like my step-dad declared our water use with the Water Commission in the 1980s, which was later verified. Our stewardship of the stream brings together centuries of Native Hawaiian knowledge that is specific to this ‘āina. Humbly, Hui members and our ancestors are the original experts with regard to the needs of Wai‘oli Stream and the Hanalei Kalana. Our stewardship of the stream is directly tied to our ability to continue our traditional practices for the generations to come – this is a kuleana to which our Hui has committed.

This responsibility is very important to me because I am raising my keiki with Native Hawaiian values in the hopes that they will develop a passion for kalo as a connection to our culture. But, without the security of knowing we have the water as we need to cultivate kalo, it is difficult for me to look them in the eye and promise that they will be able to cultivate the same patches that their ancestors stewarded for generations.

As difficult as things have been, I love what I do. This is my culture. It is what my family has been doing forever. I feel a deep sense of pride and honor to ‘auamo my kuleana and perpetuate this practice – especially now when many of my generation are becoming less interested in taro farming. To be honest, there are more lucrative ventures for some. But, what we do goes beyond monetary value; this is about kuleana. It is our way of life and we will continue to farm taro on these lands for as long as we are physically able.

A numeric IIFS would bring us peace of mind, support traditional kalo cultivation, enable ‘āina-based stewardship, and protect our stream and way of life.

Mahalo for the opportunity to share my support for this incredibly important action. Please support the staff's recommendation and vote to adopt a numeric IIFS in line with Native Hawaiian custom. Mahalo,
Kaisen Carillo

Aloha Chair Case and Members of the Commission on Water Resource Management,

My name is Wilbert "Afuk" Tai Hook and I have been farming kalo in Wai'oli Valley for over 70 years. Mahalo to the Commission, and Ayrton Strauch in particular, for all your efforts for Wai'oli Valley. We understand how important this issue is and appreciate the opportunity to share our mana'o. I would also like to say mahalo for considering Native Hawaiian customs and practices in the context of this IIFS. Our culture is the foundation of this practice and the water upon which it depends.

Wai'oli Valley is the center of our connection as a family. I started farming kalo here with my father when I was 8 years old. Now, at 85 years old, I am still farming kalo in Wai'oli. I retired as Fire Captain of Hanalei Station more than 20 years ago and I have been farming full-time since then. Farming kalo is extremely hard work and continuing this tradition at my age fills me with pride and joy. The fact that my daughter Lillian and grandson Kaisen are carrying on our tradition and culture makes that pride overflow. I am not the only farmer in my 80s that continues to farm.

Unfortunately, it seems like the younger generation is less willing to dedicate themselves to farming kalo. Kaisen is the only grandkid that has shown an interest and dedication to continuing this practice. Seeing him pass on our traditions to his own children makes me so happy and gives me hope that farming kalo will continue in our family.

We know this stream and its needs well. It's our kuleana. My father taught me how to farm kalo specifically for this area and I have continued to pass down that knowledge to my family. We know that what we do in our lo'i affects the larger watershed. The health of the stream is fundamental to our survival as well. As we take care of it, it takes care of us, and we can then take care of our families and community.

Since the 2018 floods, things have been hard for us. We have stewarded this 'āina for generations and that was the worst flooding that I've seen. The stream completely changed. It made me realize how important it is that the younger generation continue this practice. Those of us who are older cannot take care of the stream the way we used to. We need younger farmers to take leadership for the benefit of our stream and our community. This is how our family tradition will continue.

As I understand it, amending the IIFS for Wai'oli Stream would allow us to protect the stream's resources and continue our Native Hawaiian practice of farming kalo. This would be such a huge help. It would reinvigorate the hope I have for the future of our family tradition and farming kalo in Wai'oli Valley. For the first time in my life, so many of our lo'i are empty because of the inconsistent and decreased water supply. However, I have hope that we can recover and continue. Seeing the way our family and community has come together and grown has been such a joy to witness. Please help us continue to feed our families, communities, and

the generations that follow us. Please vote to approve the staff recommendation and the amended IIFS in May.

Mahalo,

Wilbert “Afuk” Tai Hook

Aloha Chair Case and Members of the Commission on Water Resource Management,

Mahalo for considering the Interim Instream Flow Standard (IIFS) for Wai‘oli Stream. I’m Chris Kobayashi, a kalo farmer in Wai‘oli Valley and member of the Wai‘oli Valley Taro Hui. I humbly continue to care for our precious resources that are an important part of our livelihood and our community. Mahalo Ayrton for all of your hard work in getting us here! **Adopting this amended IIFS would be so helpful for us farmers** because it would give us the stability to continue farming kalo to feed ourselves, our ‘ohana, and our community.

My family has been living and farming in Wai‘oli Valley for three generations and over one hundred years. My grandfather moved here from Japan and chose to begin farming in Wai‘oli. Initially, my family farmed rice, but by the early 1940s, we expanded to wetland kalo. My father was born in Wai‘oli in 1920, the fifth of six siblings. I was born and raised on the same land. My father spent his entire life farming in Wai‘oli. Back in 1989, **my family and I declared our use to the Water Commission to irrigate 15 acres of lo‘i kalo**, and the Water Commission verified our use in 1993. We have **appurtenant and riparian rights**, as our land abuts Wai‘oli Stream.

One day, my father told me that he was worried that there might not be anyone left to take care of our kalo farm. I thought of all of his blood, sweat, and tears that had gone into clearing, preparing, planting, maintaining, and taking care of the kalo and the land. I thought: I can’t let all that he put into our farm be for nothing. In that moment, I decided to take over our family farm. I continue to live on and steward that same land in Wai‘oli today.

Over twenty years ago, we started growing various vegetables and fruits using organic methods and inputs. We also applied that knowledge to our kalo cultivation and started implementing sustainable practices. We are always trying to be better. We work really hard to grow food for ourselves and to supply good kalo to small poi millers who make poi or pa‘i‘ai for their communities. We also support ‘āina-based education and organizations, as well as students and families who do traditional ku‘i with their native food. It has been a heartfelt honor to have been a part of this, and we hope to continue to supply these friends and others.

But the 2018 floods devastated our lo‘i kalo system. After the flooding, we were unable to plant new fields because all of our equipment, small tools, and our truck were ruined. After numerous repairs, we finally got our tractor fully working again in March 2019 and, weather permitting, we started mowing, tilling and cover cropping our farm and preparing our fields.

With the huli that we had available to us, we were able to plant 3 fields in 2019. We now have 7 lo‘i planted, with the potential to plant 26 lo‘i of various sizes. Our māno was repaired in Fall 2020, but last November more flooding leveled it again. This Spring, several floods have wreaked further damage.

The condition of the stream is in constant flux from all this flooding. Frequent heavy rains cause ‘ili‘ili to build up and water to breach our banks, requiring us to shovel out the ‘ili‘ili by hand

and build up the banks at the same time. We are constantly working to maintain the māno and ‘auwai, especially after heavy rain and wind events, which are so frequent these days. Neither our farm nor the Hui’s lo‘i are operating at full capacity. So, when it rains, the water in the river is high and floods the area, including Hanalei town. But, our small Hui always shows up because this is what we do; we all work together to maintain the lo‘i kalo system. We all depend on managing that flowing water for our farms and larger community.

Our Hui is a legal unicorn. We are carrying on a centuries-old traditional practice passed down to us by our ancestors. Our families have stewarded lo‘i kalo in Wai‘oli since before the State of Hawai‘i, conservation districts, and interim instream flow standards existed. Ironically, it wasn’t until we were forced to undertake major repairs because of the 2018 flooding that we discovered we had to navigate a legal maze just to continue to steward resources our ancestors protected for generations. We have been working really hard since 2018 to understand and go through all the necessary legal processes, including this IIFS. It’s a lot, but we also know that it is important for the greater good. We are grateful that the people of Hawai‘i protect the **traditional and customary Native Hawaiian practice of kalo cultivation** as a **public trust purpose under the Hawai‘i Constitution and the Water Code**.

Like our parents and grandparents, we know and mālama Wai‘oli Stream, and we understand how to balance our **instream use** with stream vitality and other needs. As the waters ebb and flow, farmers working with the land, water, and kalo are so intertwined with nature and their own lives, that we too ebb and flow. So, we’d like some flexibility to address variations with crop cycles etc., which we are hopeful we have with Ayron’s proposed figure.

This month makes three years since the 2018 floods. We need to be pau with the legal permitting so we can focus on rebuilding our irrigation system and lo‘i kalo. Where we can, we need stability and predictability in those areas that can be actively and adaptively managed. **Adopting Ayron’s amended IIFS of 4mgd would allow us to continue to take care of Wai‘oli and move forward in the legal process and with our lives.** This would be helpful for us and for future generations, as our Hui is also part of Wai‘oli’s kalo growing lineage that has persevered for hundreds of years. We carry on this tradition, this legacy, and we want this traditional culture to continue for generations to come.

Thank you for this opportunity to share my testimony and for your continued support of the Wai‘oli Valley Taro Hui. We humbly ask you to please approve the numeric IIFS for Wai‘oli Stream when you vote next month.

Mahalo,
Chris Kobayashi

Aloha Chair Case and Members of the Commission on Water Resource Management,

Mahalo for this opportunity to testify in **strong support of the numeric Interim Instream Flow Standard (IIFS) for Wai‘oli Stream**. My name is Demetri Rivera, and I am a Board Member with the Wai‘oli Valley Taro Hui. I really appreciate your staff’s kōkua on this important issue, and for Ayron’s help in particular.

Together, Chris Kobayashi and I maintain and farm about 10 acres. Our kalo cultivation is a **protected public trust purpose**, and our land has **appurtenant and riparian rights**. Back in

the 1980s, Chris and her family **declared their uses with this Commission**, which were later verified.

I have been farming kalo full-time for over 25 years. I know that wetland kalo requires good, fresh, flowing water from the mountains. Our **water use is instream** because we only use the water for kalo cultivation, and then that water flows through our lo'i kalo and back into Wai'oli Stream. If there isn't enough water or flow is inconsistent, we get lots of weeds, and our kalo quality can be so bad that sometimes we just gotta plow under. Summer is almost here, and we need to make sure that our system is repaired and the farmers can use the water we need. If 'auwai flow is low in the hot months, the water is warm and the kalo will rot due to diseases and a poor environment. No sense plant.

In the last three years, Chris and I, as well as the rest of the Hui, have dealt with devastating flooding. The Hui has maintained the mānowai, po'owai, and 'auwai for generations, and especially during emergencies, which now seems like every time there is a big rain. In the wet season, we brace ourselves for big rains and storms, hoping that there won't be any more flooding. The 2018 flood was really unlike anything we've seen. Through hard work and generous community support, we restored the māno, cleared the stream of debris, and fixed the 'auwai so that we had enough water to start planting at limited capacity again. After almost three years, **we need to move forward with the legal process so we can focus on rebuilding our lo'i kalo system**. Adopting Ayrton's proposed IIFS would bring us one step closer to resolution.

Mahalo nui for this opportunity to testify. I ask that the Commission please adopt the proposed IIFS of 4 mgd during low flow conditions.

Mahalo,
Demetri "Dimi" Rivera

Aloha Chair Case and Members of the Commission on Water Resource Management,

Mahalo for this opportunity to provide testimony on this important matter. As a kalo farmer in Wai'oli Valley, Kaua'i and a member of the Wai'oli Valley Taro Hui, I strongly support the amended Interim Instream Flow Standard (IIFS) for Wai'oli Stream.

My name is Dwight Morishige and I am a third generation kalo farmer. I have been farming in Wai'oli Valley for over 40 years and my family has been here in Wai'oli for 120 years. I grew up in a community that dedicated itself to farming kalo. From before I can remember, my father and his family farmed kalo. I learned how to farm from my father-in-law, Bobby Tasaka, who filed a declaration of water use for the land I now steward. I currently lease ten acres for kalo cultivation, and carry on my family and community's kalo farming practices just as I was taught. The 2018 flood was the worst I have ever seen. All of our hui's kalo farmers, both individually and collectively, suffered tremendous impacts from that flooding.

Even though our community has always been tight knit, this is the first time we received so much help. We have always worked together to manage our resources on a regular basis. This includes regularly maintaining the entire lo'i kalo irrigation system, as well as the stream and watershed upon which we depend. We know this place really well and are familiar with the resources within it.

Since the flood, our hui has been working hard to fulfill the necessary requirements to make sure we can continue our practice of kalo farming in Wai‘oli. Without this help and cooperation, kalo farming would not be possible. As a nutritional food and community practice, it is important that our younger generation be able to continue our family and Native Hawaiian practice of farming kalo.

Thank you for your time, work, and for this opportunity to share my support of the amended IIFS for Wai‘oli Stream, which will allow us to continue our traditional and customary kalo cultivation for future generations. Please adopt the amended IIFS in May.

Mahalo,

Dwight Morishige

Aloha Chair Case and Members of the Commission on Water Resource Management,

Thank you for the opportunity to testify on this important matter. As a taro farmer and member of the Wai‘oli Valley Taro Hui, I strongly support the amended Interim Instream Flow Standard (IIFS) for Wai‘oli Stream.

My name is Wayne Tanji and I have been farming in Wai‘oli Valley for over 30 years. Prior to becoming a farmer, I worked retail in Hanalei. My friends were taro farmers and so I eased into farming by slowly acquiring patches from them. Eventually, I decided to farm full-time. I currently lease 1.8 acres of land where, prior to the floods in 2018, I maintained seven wetland kalo patches. Kalo farming is a big part of Wai‘oli’s identity.

As a Hui sharing kuleana over the same system, we know that our water use affects others further down the ‘auwai so we all work hard to ensure that our uses are as efficient as possible to reduce impacts on others. Because of the ongoing maintenance to our lo‘i kalo system and intake in particular, our Hui lacks the water we need to cultivate all of our crops. The 2018 flood completely devastated my farming operations. Because of the location of my patches, the damage to our ‘auwai system has hit me particularly hard. My lo‘i are not receiving enough water to ensure a consistent level of through-flow and, as a result, my taro does not receive enough water to grow properly. Without the necessary water to act as a weed suppressant, I cannot eradicate the weeds fast enough to save my kalo.

Currently, at 71 years old, I am barely able to maintain two of my original seven patches. Although sometimes friends give me a hand, I mostly farm alone. Even if the water flow returned to pre-flood levels today, it would still take me about a year to get back to “normal” production. To say that this situation is causing me stress is an understatement. Water is so vital for us to continue farming, it is the lifeblood of this place and our practice. Without it, we cannot survive.

We are still working hard to recover, but adopting an amended IIFS for Wai‘oli Stream would ensure protection of one of our most valuable resources: water. The historic floods caused immense damage to our water system, which has been compounded by increasing and severe weather events. Establishing the amended IIFS would get our Hui one step closer to pre-flood conditions. It would give me hope that we can continue kalo farming in Wai‘oli for generations to come, something that I think is really important for our small community.

Thank you again for this opportunity to submit testimony in support of the amended IIFS for Wai‘oli Stream. Mahalo, Wayne Tanji

Aloha Chair Case and Members of the Commission on Water Resource Management,

Mahalo for the opportunity to testify on this important matter. As a kalo farmer and member of the Wai‘oli Valley Taro Hui, I strongly support the informational briefing and amended IIFS. I am also grateful that your staff used Native Hawaiian custom and tradition as a basis for the IIFS – that’s pono. My name is Sierra-Lynn Stone and I am a fifth generation Native Hawaiian kalo farmer in Wai‘oli Valley. The legacy my family has created inspired me to begin farming and it is what drives me to continue. Farming kalo is my passion and is a purposeful way to live life.

Today, I come before you with the hope that this Commission can help to ensure a future in farming for me, my young family, and the families of all the other kalo farmers in Wai‘oli Valley by adopting an amended IIFS.

My love for farming began at an early age. I was raised in the lo‘i kalo where I learned and grew to love the culture of kalo, the various aspects of hard work, and how to have fun while working. My dream is to carry on this tradition and lifestyle, and to teach my children and future generations of my family to love it as I do. Initially, my career pathway was very different. After I graduated from high school, I went off to Washington State University to become a registered nurse. While there, my grandfather’s health took a turn for the worse. I had the option of continuing school in Washington, but instead, I chose to return home to run the family farm. Since 2010, I have been running the entire farm.

Our farm is 9 acres. Since the flooding in 2018, we have struggled to maintain our “normal” operations. We have had to deal with many challenges, but we work really hard to continue. Right after the 2018 floods, we were informed that portions of our centuries-old lo‘i kalo irrigation system, a system that predates modern zoning laws and the Water Code itself, was located on state conservation land. Since then, we had to get a right of entry and easement so we could access and maintain our mānowai and po‘owai. Now, we are before you seeking an amendment to the IIFS for our traditional use that has always existed in Wai‘oli Valley. This has really affected our entire community. These legal and legislative processes have been difficult to track and effectively participate in. But, we are doing our best because we are committed to this place. With your Commission’s help and an amended IIFS, we can maintain what is pono: adequate water for our stream, stability for our farms, and support to continue our practice.

While we’ve been able to make some progress since the devastating floods, our farm, as well as all the other farms in Wai‘oli, still have a long way to go. Flooding continues to happen in Wai‘oli. As you know, we’ve already endured several weather events in the last several months. Our families and our community rely on us to face challenges as they come. My love for farming is limitless — it is hard to put into words. The opportunity to love what you do, and do what you love, is an experience that I hold dear. It is priceless and I plan to continue my family’s tradition of farming here on the North Shore of Kaua‘i. With the Water Commission’s help, I can do just that.

Thank you again for this opportunity to testify. Please vote in May to adopt a numeric IIFS and support traditional kalo cultivation in Wai‘oli. Mahalo nui! - Sierra-Lynn Stone

Aloha Chair Case and Members of the Commission on Water Resource Management,

My name is Nathaniel Tin Wong. I am a kupa 'ai au of Kaua'i and a Board Member of the Wai'oli Valley Taro Hui. Native Hawaiian practices, like kalo cultivation, are an integral part of Hawai'i today, and we must protect these cultural practices so that they can be passed on to our keiki. I am grateful to be able to share my thoughts with you on why your **Commission should adopt a numeric Interim Instream Flow Standard (IIFS) for Wai'oli Stream.**

I know how important it is to grow kalo, even though in relation to my fellow Wai'oli Valley Taro Hui members, I am relatively new to farming. I have developed an intimate understanding of how the plant, over many generations, has allowed our people to pass on ancestral knowledge. Knowledge that teaches and epitomizes, at its very core, the mana'o of sustainability. This knowledge teaches us how to be better stewards of our 'āina, how to act in our environment, and how those principles translate to how we interact with each other as humans. Farming kalo feeds not only my physical self, but also feeds my na'au. My practice, as a kalo farmer, keeps me grounded, and without it, it is easy to get lost. I consider my practice and work important not only to my community, but to humanity as a whole.

I have been given the opportunity to farm lo'i kalo with Aunty Chris Kobayashi and Uncle Dimi Rivera in Wai'oli. This 'āina has appurtenant and riparian rights, and Aunty Chris and her 'ohana declared their water uses for kalo with this Commission back in the day. As a Native Hawaiian, farming kalo is also a traditional and customary practice for me and my 'ohana. Growing kalo through organic methods allows me to help to feed my community because people need this mea'ai. One principle that I strongly believe in is having my family eat together as a household.

Eating kalo and poi together as an 'ohana nurtures and promotes cohesion, which is reflected in other aspects of our 'ohana's life and also for other 'ohana that my kalo feeds. The way that we treat each other at the dinner table and around the poi bowl embodies the spiritual side of food; it is a discipline that teaches us how to treat one another with love and respect. I want to pass these values and principles on to my keiki so that they can continue for generations to come.

The April 2018 flood devastated our 'āina and lo'i kalo, and my 'ohana and I have been forced to start over from the beginning. My wahine, Dominique, and I talked about the seemingly overwhelming amount of work it would take to keep growing kalo. We both decided this is something central to our lives and values and committed to kalo farming as a lifestyle. I am dedicated because I know how important this is to me and my 'ohana. The silver lining in it all, however, has been the closeness and cohesiveness we have developed between us Wai'oli farmers, working together to help to better the conditions to the extent that we can, so we can all too.

I am grateful that the people of Hawai'i have committed to protecting traditional and customary Native Hawaiian practices, such as kalo farming, through our Constitution, Water Code, and other laws. With the rapid changes in our community on Kaua'i from tourism and the slow, but steady, change in demographics, it is important for me that this Commission know that **we—Native Hawaiian practitioners—are still alive, we are still here, and we are devoted to exemplifying those values and traditions passed on to us by our ancestors, namely living with the land and farming kalo.** My daughters are the sixth generation of our 'ohana in Hanalei and, skipping a couple generations, the fourth generation to be farming lo'i in Wai'oli. Culture and practices like kalo farming are still very much here and they must be protected so that they

can be passed on to our keiki. I have found, for myself, in kalo farming what has been missing in my life. I was suppressed from my culture growing up and have only now been able to engage in practices, like farming lo‘i kalo, which has allowed me to reconnect with those same kinds of things that my ancestors celebrated. I hope to be able to pass these cultural practices and values on to the next generations, just as I have been able to learn from Auntie Chris and Uncle Dimi.

Knowledge about kalo cultivation and ‘āina stewardship has been a blessing for me. I will give my children this lifestyle, and I feel that it is my kuleana to keep kalo farming alive for them. But to do so, the numeric IIFS for Wai‘oli must support both the life of the stream and the life of the land, especially the lo‘i kalo that have thrived here for centuries. We are grateful for your staff’s kōkua, and Ayrone’s hard work in particular. It is refreshing to see Native Hawaiian principles and values come to life in actual decisionmaking, such as having an IIFS for our stream based on a Native Hawaiian principle of diverting not more than 50% of flow. This Native Hawaiian approach is entirely appropriate for our Hui’s Native Hawaiian practice of kalo cultivation.

We in Wai‘oli have always been, and will continue to be, committed to providing sustenance for our communities. Cultural practices such as kalo farming must be protected so we can pass them on to our keiki. It is also important to continue these practices so they can be taught to others when the time is right. **Please vote to adopt the proposed IIFS for Wai‘oli Stream in May, which we believe is sufficient to enable our cultural practices as Native Hawaiians to thrive for generations to come.**

We always tell our daughters they can be anything. Today, you have the power to allow them to be kalo farmers, if they so choose.

Mahalo for your time and aloha,
Nathaniel Temanu Tin-Wong

Re: Agenda Item C3: Informational Briefing Regarding the Amended Interim Instream Flow Standard for Wai‘oli Stream, Halele‘a, North Kaua‘i

Aloha Chair Case and Members of the Commission on Water Resource Management,

Mahalo nui for the opportunity to submit testimony in support of the amended interim instream flow standard (IIFS) for Wai‘oli Stream. My name is Emily Schlack and I am a student at William S. Richardson School of Law, as well as a Native Hawaiian. The Wai‘oli Valley Taro Hui has been stewarding Wai‘oli Stream and their surrounding lo‘i kalo for generations, and they are an incredible example of how cultural traditions and practices can be passed down through generations and continue to grow in strength. The Hui’s ancestors have been stewarding this same land, cultivating kalo, and feeding the lāhui for generations, and theirs are the voices who should be heard in decisionmaking regarding Wai‘oli Stream, which they have been caring for since time immemorial.

The traditional and customary practices of Native Hawaiians are an amazing resource endemic to Hawai‘i, but just as we must all mālama the natural resources such as our water, our cultural traditions must also be stewarded. Without careful cultivation, preservation, and the ability to pass these practices on, our culture will not survive. This is why it is imperative that we do

everything we can as a community to help our cultural practitioners both continue their traditions and pass them on to generations to come. One way for us to help with this would be to ease the Wai‘oli Valley Taro Hui’s path forward in recovering from the multiple floods that have occurred over the last several years, which is why I ask that you adopt this amended IIFS in May.

Without traditional and customary practitioners such as the Wai‘oli Valley Taro Hui, our culture’s roots cannot thrive - we need them to keep the generational knowledge and wisdom that they have accumulated alive. Mahalo nui for your time and compassionate consideration of our community’s most valuable resources – our water and Native Hawaiian culture.

Me ke aloha,
Emily Schlack

April 17, 2021

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

**RE: TESTIMONY IN STRONG SUPPORT OF AGENDA ITEM C-3
Draft Amended Interim Instream Flow Standards for the Surface Water Hydrologic
Unit of Wai‘oli (2018): Wai‘oli Stream, Halele‘a, North Kaua‘i**

Aloha Chair Case and Members of the Commission on Water Resource Management:

My name is Alexa Deike and I am in my last semester of my advanced Juris Doctor program at the William S. Richardson School of Law at the University of Hawai‘i at Mānoa. Before moving to Maui in 2010, I had passed the bar in Germany. The 100-year flood in ‘Īao Valley catalyzed my decision to return to law school to be able to practice in the area of water law here in Hawai‘i.

This is also my third continuous semester of supporting the Wai‘oli Valley Taro Hui as part of the Environmental Law and Native Hawaiian Rights Clinics. Mahalo for the opportunity to testify regarding the importance of setting a numeric IIFS for Wai‘oli Stream.

First, I would like to mahalo your Commission, Deputy Director Kaleo Manuel, and Commission staff Ayron Strauch for the tireless support in proactively drafting an amended IIFS for Wai‘oli Stream, which will facilitate the issuance of a water lease for the Wai‘oli Valley Taro Hui. The Wai‘oli Valley Taro Hui and Wai‘oli Stream are truly unique and special. In Clinic, we often refer to them as “legal unicorns.” For example, this lo‘i kalo system has been in perpetual use since time immemorial and Wai‘oli Stream is one of the very few streams in Hawai‘i that has not been siphoned for plantation purposes. Instead, Kānaka Maoli have cultivated kalo and always stewarded this water guided by the principles of aloha ‘āina – resource management in harmony and reciprocity with the ecosystem. Their diversion intake, the mānowai, was carefully designed to take only as much water as needed and break away in times of high streamflow. The Wai‘oli Valley Taro Hui continues this traditional and customary Native Hawaiian practice.

Most members of the Hui have been kalo farmers for four to six generations, some are farming the same kuleana lo‘i that their ancestors have cultivated for centuries. The Wai‘oli Valley Taro Hui is

an example of a living culture and authentic Native Hawaiian way of life that is fast disappearing in Hawai‘i today.

This amended IIFS for Wai‘oli Stream is just as unique and special. It will protect and perpetuate kalo cultivation in Wai‘oli Valley for the generations to come. During my time in law school, I have researched and written on water conflicts involving IIFSs in East Maui and Nā Wai ‘Eha. Even before I even started law school, I testified before this Commission on the IIFS in West Maui.

Unlike those IIFSs that had to restore streams to enable farmers to resume or begin kalo cultivation, your Commission has the opportunity here to strengthen and secure the unbroken practice of farming kalo in Wai‘oli Valley into the future – to be proactive in protecting instream uses and traditional and customary Native Hawaiian practices precisely as Hawai‘i’s Constitution and Water Code contemplate. Chair Case mentioned in the February 2020 BLNR meeting regarding the Hui’s perpetual easement, that *“What we are trying to do here, is fit an old system into a new legal system!”* I agree completely and propose that one of the best ways to do that is to adopt the amended IIFS in May, and as part of that process, to specifically recognize and make determinations regarding the Hui’s appurtenant, riparian, and traditional and customary Native Hawaiian rights.

Me ka Mahalo,
Alexa Deike

April 20, 2021

Re: Agenda Item C3

Aloha Chair Case and Members of the Commission on Water Resource Management:

Mahalo for this opportunity to testify in support of the amended Interim Instream Flow Standard (IIFS) for Wai‘oli Stream. Mahalo nui to Ayron and the entire Commission for all of the time, attention, and energy that you have given to our Law Clinic and the farmers we are fortunate enough to assist. What you do for our communities is invaluable and we look forward to being able to continue working with you all.

My name is Kevin Fernandez and I am currently a law student at the William S. Richardson School of Law. I have had the honor and pleasure of working with the Wai‘oli farmers on two separate occasions: in the fated Spring of 2020 and currently this Spring Semester 2021. My time spent learning the beautiful intricacies of who they are, who they come from, and the intimate relationship they have with the land they steward has impacted my life in a way I will forever be grateful for. It is a glimpse into a reality where a revered relationship with the environment in which one lives is paramount to a true understanding of self. A reality I had forgotten over the course of my first two years in Law School.

In my undergraduate studies I was fortunate to be part of a Hawaiian Leadership Program even though I am not Native Hawaiian. However, my time in that program has been the most influential experience since I moved to ‘Oahu ten years ago. We learned about the current realities of a modern Hawai‘i within the historical context of the continued subjugation of Native Hawaiian rights, traditions, and practices. I was humbled to be taught how to respect and serve the community that affords me the opportunity to experience its indigenous culture. That experience gave me a more

rooted understanding of self and my own ancestral history. This was a driving factor in my decision to attend Law School here in Hawai'i. I wanted to be of service and I figured the legal field gave me the best platform to do that.

Throughout Law School I was led by that desire to serve. However, the reality of Law School after my first year and a half left me incredibly disheartened and that desire to serve felt hopeless. I was yearning desperately for some semblance of the experience I had in undergrad. I started to believe that perhaps the legal field lacked the interpersonal connections and ability to serve in the way I had hoped. Fortunately, I decided to take the Environmental Law Clinic in the Spring of 2020 and I was able to find hope again. Visiting Wai'oli Valley and getting the chance to work with the farmers helped bridge the gap between the experience I had in undergrad and my experience in Law School up until that point.

Just the opportunity to have met and helped the farmers makes the struggle of Law School more than worth it. They are truly some of the most beautiful and genuine people I have come across in life. They love what they do and why they do it. They are also experts in how to best steward the kalana they farm in and call home. This cannot be emphasized enough. The rooted knowledge these farmers draw upon runs as deep as 6 generations. There may have never been a better opportunity to do something truly groundbreaking: utilize these farmers' ancestral biocultural knowledge to better your western management system. How can we better serve a system that thrived for a millennium prior to western contact? How can a western management system be improved by allowing Hawaiian knowledge that has been perfected since time immemorial lead the way? Creating a system that is built around traditional and customary Native Hawaiian practices, like those of the Wai'oli Valley Taro Hui, would be a monumental step in the right direction. This is the epitome of what law and science is supposed to be about. The basis for Wai'oli Stream's IIFS in Native Hawaiian custom and tradition is a good start. But more can and should be done to operationalize the Hui's biocultural knowledge.

Again, I cannot thank you all enough for your time and effort.
Kevin Fernandez

April 20, 2021

Re: Agenda Item C3

Aloha Chair Case and Members of the Commission on Water Resource Management:

Mahalo for the opportunity to testify in support of the amended Interim Instream Flow Standard (IIFS) for Wai'oli Stream. My name is MJ McDonald, and I am a law student at the William S. Richardson School of Law at the University of Hawai'i at Mānoa. I've had the pleasure of working with and learning from the Wai'oli Valley Taro Hui this past semester. I am so grateful to Ayrton Strauch and the rest of your staff for their hard work, and I believe Ayrton's proposed IIFS of 4 mgd for low flow conditions in Wai'oli Stream is appropriate.

There should, however, be a lower monitoring standard for water uses for traditional and customary Native Hawaiian practices, such as the Hui's lo'i kalo irrigation system in Wai'oli Valley,

which is an instream use with all water returning to the same Kalana. The Commission should embrace an adaptive management approach for these practices, such as wetland kalo cultivation, and authorize Deputy Director Manuel and Ayrton Strauch to work in partnership with the Hui to craft a schedule and method for water use reporting appropriate for their public trust purpose and also respectful of their deep knowledge of these specific resources.

Ancestral knowledge passed down over four to six generations informs the Hui's stewardship of Wai'oli Stream and Watershed. The farmers' lifeways are rooted in close observation, adaptive stewardship, and aloha 'āina. They are expert managers of Wai'oli Stream, and their 'ohana have been stewarding the Hanalei Bay Kalana since before IIFSs, Hawai'i Revised Statutes Section 174C, and the State of Hawai'i even existed. In short, the farmers know what is pono, and they are the best equipped to mālama their own biocultural resources. They have been doing so successfully for over a century, and to now impose even more requirements adds insult to injury.

Requiring the farmers to report their uses to the Commission monthly would be a significant burden. The Hui is still in basic recovery mode from the devastating 2018 floods, as well as more recent flooding last Fall and this Spring. Many of the farmers are aging, so monitoring duties will fall on specific Hui members who are raising young families, working full-time jobs, and caring for their kūpuna. The farmers are pursuing options for a flume or weir, but funding is an issue. Requiring that the Hui report their uses twice a year, or each quarter at the most, would be more manageable. The farmers check and adjust their water levels daily, and will continue to do so. This requirement affects only the frequency with which they are required to share that information with this Commission.

In sum, the farmers need and deserve the time and flexibility that an adaptive management approach provides. The Hui is excited about the possibility of continuing to work with Deputy Director Manuel and Ayrton, both of whom have been supportive throughout this process. I urge your Commission to embrace this opportunity to create a new adaptive management approach for traditional and customary Hawaiian practices that can serve as a model for future biocultural resource management. I ask that you amend the reporting requirements to twice a year, or each quarter at the most, because water use for traditional and customary Native Hawaiian kalo cultivation should not be subject to the same monitoring standard as large-scale, exploitative diversions.

Mahalo for your consideration,
MJ McDonald