

MINUTES
FOR THE MEETING OF
THE COMMISSION ON WATER RESOURCE MANAGEMENT

DATE: February 15, 2022
TIME: 9:00 am
PLACE: Online via Zoom
Meeting ID: 864 2230 7138

Chairperson Suzanne D. Case called the meeting of the Commission on Water Resource Management to order at 9:01 a.m. and stated it is being held remotely and being live streamed via YouTube for public viewing due to the ongoing Covid-19 pandemic. It was noted the meeting was set to take live oral testimony and written testimony received would be acknowledged upon the submittal item. Chairperson Case took a roll call of the Commissioners.

MEMBERS: Chairperson Suzanne Case, Mr. Michael Buck, Mr. Neil Hannahs, Dr. Aurora Kagawa-Viviani, Mr. Wayne Katayama, Ms. Joanna Seto, Mr. Paul Meyer

COUNSEL: Mr. Colin Lau; Ms. Linda Chow

STAFF: Deputy M. Kaleo Manuel, Mr. Neal Fujii, Mr. Ryan Imata, Mr. Dean Uyeno, Dr. Ayron Strauch, Mr. Jeremy Kimura, Ms. Rae Ann Hyatt

OTHERS: Mr. Avery Chumbley (Wailuku Water Company) (WWC); Mr. James Geiger (Counsel for WWC); Mr. Paul Mancini (Counsel for WWC); Mr. Hōkūao Pellegrino (Hui o Nā Wai 'Ehā); Ms. Crystal Smythe; Ms. Emilou Alves; Mr. Isaac Moriwake (Earthjustice); Ms. Clare Apana (Sierra Club Maui); Ms. Mary Ann Boyle Velez; Mr. Robert Street; Ms. Joyclynn Costa; Capt. James Meyer (Joint Base Pearl Harbor-Hickam); Capt. Randy Harmeyer (JBPHH); Mr. Jeremy Mitchell (JBPHH); Mr. Travis Hylton (JBPHH); Mr. Delwyn Oki (U.S. Geological Survey); Mr. Rylen Nakama (USGS); Mr. Tom Giambelluca (University of Hawaii); Ms. Catherine Rong (UH); Mr. Yinphan Tsang (UH); Mr. Don Thomas (UH); Ms. Kathleen Ho (Dept. of Health)

All written testimonies submitted is available for review by interested parties and is posted online upon the Commission on Water Resource Management website.

Chairperson Case notified that the Red Hill agenda items was set to be heard at 2:00 pm.

021522 00:05:20

A. APPROVAL OF MINUTES

January 7, 2022
January 18, 2022

PUBLIC TESTIMONY – None

MOTION: (HANNAHS/KATAYAMA)

To approve the minutes as submitted.

UNANIMOUSLY APPROVED

CASE/BUCK/HANNAHS/KAGAWA-VIVIANI/KATAYAMA/MEYER/SETO

021522 00:06:18

B. ACTION ITEMS

- 1. Clarify the Distribution Points for South Waikapū ‘Auwai as Part of the Implementation of the Final Decision and Order for CCH-MA15-01 and Order Wailuku Water Company and Waikapu Properties, Inc. to Implement Certain Actions to Initiate Delivery of Water to the South Waikapū ‘Auwai, Nā Wai ‘Ehā Surface Water Management Area, Waikapū, Maui**

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

Mr. Uyeno read the summary of request as submitted and stated that staff stands on its submittal. Mr. Uyeno then read the staff’s recommendations #1-4.

Chairperson Case asked Commissioners for questions then decided to hear public testimony before taking questions from Commissioners.

PUBLIC TESTIMONY

Mr. Avery Chumbley, Wailuku Water Company (WWC) – Thank you Chair Case and Commissioners. Good morning, Wailuku Water is prepared and ready to assist and finalize this conversion. The only remaining issue that we have is that the meter-located at the distribution point just below the filter station, is non-functional and that meter needs to be replaced by Waikapu Properties.

I understand that they either have ordered it or are aware of that conversion that needs to be done for that meter. Other than that, I believe they've taken care of the rest of all the hookup.

Mr. Paul Mancini, Counsel for Wailuku Water Company – replied I have nothing to add to that.

Mr. James Geiger Counsel for Wailuku Water Company – replied nothing to add but will be available for questions.

Mr. Hōkūao Pellegrino, Hui o Nā Wai ‘Ehā – Aloha e Chair Case, Deputy Director Manuel Commissioners and staff. It has now been 482 days since the South Waikapū kuleana kalo farmers and water use applicants on the South Waikapū kuleana ‘auwai except for Mr. Suzuki, have had any water flowing into their ‘auwai.

They've been unable to cultivate kalo, lo‘i have completely dried up, cracked, and are full of leaves. Longevity of this resolve is of unreal proportions. How much longer must the kuleana suffer? While the Hui and the kuleana are truly grateful to Mr. Atherton and Mr. Ting for going above and beyond to build community relations by literally reconnecting the lifeline these people depend on, there's no doubt that Wailuku Water Company will continue to make every part of this result difficult, if not impossible, to work even in the short term, and forcing us right back to square one again, returning to this Commission.

Look at the hoops and bounds it took us to get here today. The pipeline built with full disclosure and approval by all parties, including the Commission and Wailuku Water Company back in October of 2021, yet Wailuku Water Company refused to allow the water to flow into this pipe via Reservoir 1 and into the ‘auwai to kuleana users as dated on February 1st, 2nd & 3rd, through multiple email exchanges between Mr. Atherton, CWRM and Mr. Chumbley. Even Chair Case and Deputy Director specified to him that this was approved and should be opened immediately following the completion of the 4-inch line.

What happened next was even more degrading based on Mr. Chumbley's response to the Commission, Chair and Deputy Director. That Aunty Crystal and the Alves ‘Ohana to literally write 2 sentences specifying that they were aware of the new system and that they approved it, even though they had already advocated for this short-term solution. With all due respect Commissioners and Chair, at what point are you going to realize what we are dealing with in Nā Wai ‘Ehā? As mentioned, this issue is far from over, even when the pipeline is charged and flowing into the kuleana ‘auwai.

Yesterday, February 14, 2022, a certified letter arrived at Mr. and Mrs. Chumbley's residence on behalf of the Hui and South Waikapū kuleana users Alves, and Smythe, formally requesting the Hui access through their property to exercise their appurtenant rights and traditional and customary rights as Native Hawaiians, for use of Waikapū Stream, water to cultivate kalo on their kuleana land via historical ‘auwai that still remains today. We are waiting for an immediate response as to whether it will be agreeable to these traditional and customary rights being exercised or not. Maybe this is something he can clear up and share his stance on in front of all of us today. That would be a great question for you to ask following my testimony.

We have also reached out to the State Historic Preservation Division to make them aware that the pre-western contact ‘auwai system is predominantly intact on that land and that they conduct the site visit to map, photograph, and document its current state to ensure that while we await Mr. Chumbley's response, that absolutely no destruction and modification occur on that parcel of land in that highly sensitive area. The Hui has also taken photographs of its current state and portions of the ‘auwai which include detailed remnants of stone lined ‘auwai system through multiple LCAs that tie into Waikapū Stream.

This quest to restore the traditional South Waikapū kuleana ‘auwai is not something new. In

fact, written testimony by former Wailuku Sugar Agribusiness employee and kalo farmer Alfred Santiago stated in 2007 during the first Nā Wai 'Ehā contested case the following, ...“historically an ancient 'auwai took water directly from Waikapū Stream to the kuleana users on the south side of the stream”... (I'm just going to paraphrase because you have a lot of testimony, and I included this in the written testimony and it's very it's very important that you read through that particular part for the record).

In closing, Hui o Nā Wai 'Ehā and the South Waikapū kuleana users which include the Alves and Smythe 'Ohana, formally and respectfully request support and approval by this Commission to allow access for the restoration of this historical and traditional South Waikapū kuleana 'auwai, not only as a means to be independent of Wailuku Water Company system, but because it is their traditional and customary and appurtenant right, that according to the Water Code 174C shall be upheld and protected by this very Commission. The Hui humbly asks that these discussions take place beginning today whether it is before all of you, or whether it's an executive session with your attorney general; we would like to know the stance of this commission on this matter and put this on the record. While the short-term solution is being resolved today, a long-term solution is an urgent need and something that cannot wait another 480 days to resolve, pau and I'm here for questions.

Mr. Isaac Moriwake, Earthjustice – *deferred until after all kuleana users have testified.*

Ms. Crystal Smythe, South Waikapū kuleana farmer – Good morning, Chair and Commissioners. Thank you for allowing us to appear once again on this morning's agenda. Hōkūao Pellegrino, the President of Nā Wai 'Ehā, has clearly expressed our concerns, and emotions and we can only at this time plea once again that we receive the full support of this Commission in our quest and petition to have water to our ancient kuleana kalo.

Thank you for your time and please I ask that I not have to reappear at this Commission another time; thank you.

Ms. Emilou Alves, South Waikapū kuleana farmer – Aloha Commissioners and interested participants, on behalf of myself and my family, the Alves 'Ohana, we appreciate all that Mr. Atherton did in placing the pipes to our 'auwai but as you well know according to Hōkūao, we still have no water.

I would like to also move forward in planning to reinstate our original South Waikapū 'auwai. We did submit a written testimony and we're hoping that we could have a plan to reinstate our traditional South Waikapū 'auwai as soon as possible. I think we made a formal request to the landowners, but we're still awaiting the response on whether they'll grant us access to restore our 'auwai. We have hiked up 'auwai recently and we have it all clean it looks great and there's a few minor or major things that have to be done; but I believe that restoring the traditional 'auwai is doable; thank you.

Mr. Isaac Moriwake, EarthJustice – Thank you and good morning, everyone again. I want to thank Deputy Director Manuel and the Commission for taking action on this important matter of protecting constitutionally and traditionally protected established rights to kuleana water.

This is the Commission's kuleana to uphold, recognize, and protect these rights. I have nothing really to add to Mr. Pellegrino's testimony and the testimony of the individual kuleana right holders. They really speak for themselves. I just wanted to highlight a couple issues. I heard Mr. Chumbley today saying that he demands there's a meter to be put in. I'm not sure if he's demanding that bit of implementation happen before the water gets released and provided; I hope not. This Commission was already informed of this fixed short-term solution last October. It's regrettable that this short-term fix took 4 months to get going. It's been 16 months altogether that this paramount kuleana right has been completely cut off.

I do want to thank Mr. Atherton for providing this short-term solution. Commissioner Hannahs said 4 months ago, he described Mr. Atherton as a good Samaritan and that really sums it up. He's being a good neighbor by providing this infrastructure to reestablish the delivery access of this kuleana right. I appreciate him taking responsibility as a good neighbor, but I want to highlight both for the short-term but for the longer-term solution that the kuleana owners and Hōkūāo have highlighted, it's not Mr. Atherton's responsibility. It's Wailuku Water Company or specifically his predecessor that put in that ditch and connected the kuleana users to that route in the first place. We can discuss this further going forward because there has been an expressed request to reestablished the traditional 'auwai but like I did in October, I'm going to highlight again for this Commission that this issue is still ongoing, it's not going to go away and really we have to collectively, with the Commission taking the lead, because the Commission is the modern day konohiki to reestablish this kuleana right for the long-term so that we're not going to be in the same situation several months from now or tomorrow.

One last question Wailuku Water Company raised about the Commission's jurisdiction. The Decision and Order is up on appeal. No one has requested a stay, it's in full legal effect, the Commission has the jurisdiction and authority to implement it in the meantime; so whether this is amending the previous decision or issuing a new order to require this implementation there's certainly authority for this and precedent for it in the previous Na Wai 'Eha instream flow standards case 2010, the Commission issued subsequent orders to calibrate the instream flow standard for South Waiehu kuleana at that time. Let's not get wrapped up or tripped up by these false legal technicalities, let's get this done. It's long overdue and it's constitutionally required. I'm here to respond to any questions, including legal ones if they come up.

I appreciate again the Commission and Mr. Atherton for being solution oriented in trying to uphold the law and principles behind these kuleana rights.

Mr. Mike Atherton, Waikapū Properties – I'll give you an update of where we are. The CLA valve that was back ordered came in yesterday afternoon. I sent the boys down to pick it up this morning and we'll install as soon as we get it. We had to put new sand in the sand filters. The main 8-inch main line hasn't been maintained very well so we went and re-did it and had a couple of leaks we had to fix. I'm hoping we'll have this thing up and running this week.

021522 00:28:23

Chairperson Case read the standard contested case statement.

(end of public testimony)

QUESTIONS/COMMENTS

Commissioner Hannahs – (to Deputy Manuel) asked why this matter is back on the agenda as it comports with the D&O and actions made in January and wanting to ensure the D&O is enforced and to make sure everyone gets what they're supposed to and not to delay any needed assets required to raise kalo.

Deputy Manuel – out of caution and reassurance, to get the Commission to collectively weigh in on this decision, we're bringing it forward for your complete decision making. We'll be taking up Item B-3 to delegate authority to the Chairperson to make these administrative implementation orders or implement the order of the Commission. It is consistent with the intent of the order because the formal delegation maybe wasn't explicit so that we can expeditiously implement those. I do think it's within the Chair's, as well as my power, within the Code to implement the orders and for clarity this is more formal to the Commission, so all users understand what's expected of them in order to meet the intent of the Commission.

Chair Case – added we think we have this authority and that you want us to do this; but to the extent anyone thinks that's not clear, we're bringing this back to finalize it and asking for delegation to make it crystal clear.

I want to understand whether it's Mr. Atherton or Mr. Chumbley, what would stop us from ensuring that the pipe is turned on tomorrow or today?

Mr. Chumbley – replied if the Commission in its order today is requiring Waikapu Properties to report their usage, it would seem that it's important that the water meter below the filter station be installed and be operational so that the volume of water distributed from the water filter is the gross amount. The meter which will be installed prior to the CLA valve before Mr. Suzuki's lateral will then be the volume of water that's used and dropped to the kuleana users, so you need to net out the two volumes for reporting purposes. It seems to me that the meter at the filter station is an important part of your order and requiring the reporting and tracking of the volume of water that's distributed and used.

Chair Case – it's important to get the water going then to measure it at this point.

Mr. Uyeno – I did go out in the field last Monday and spoke with Mr. Duane Ting of Waikapu Properties, and accordingly also to my understanding the meter there is working and that's how Waikapu Properties is getting charged.

Mr. Chumbley – Chair, that's not my understanding, that's incorrect. When Kumu Farms was using water out of Reservoir 1 prior to the order to cease that usage, that meter had not worked for some time and the conversion to a lower filter station was done, so that the tracking and the usage of the water delivered to Waikapu Properties which was being used by

Kumu Farms was being measured at the lower filter station not at the upper filter station because the meter was inoperable.

Chair Case – you were providing water to someone who wasn't authorized without measuring it and now we're arguing about not providing water to the people who are authorized to have it until we're triple sure all the meters are working right.

Mr. Chumbley – the water delivered to Kumu Farms was being measured at a lower filter station.

Chair Case – *reiterated stance* and added I just want to make really sure that whatever the Commission does today, makes it really clear that you turn on the water to the 'auwai today.

Mr. Chumbley – I don't think the CLA valve, the pressure reducer, is installed yet. I don't believe it can be turned on until all of the remaining apparatuses are installed, otherwise you could have a rupture of the line due to high pressure. That's up to Waikapu Properties folks to get all that installed.

Chair Case – asked for Mr. Atherton's comment as it sounds like the valve is ready to be installed and asked if it could be installed this week and want to make sure the water is delivered when installation occurs.

Mr. Atherton – we got the CLA valve yesterday and picking it up right now; we'll get it installed today if we can. We have a leak in the pressure reducing valve that we're going to fix today, and I'll turn the water on as soon as those two things are done, and I'm told that it's okay to do that.

Chair Case – our plan is to tell you It's okay to do that as soon as you're ready, valve wise. I want to make sure Mr. Chumbley is clear that's what's going to happen.

Mr. Atherton – Okay, I understand.

Mr. Chumbley – Once we receive notice that the CLA valve is installed and they're ready to go, we're fine with the conversion. I still feel that the meter needs to be replaced at the top filter but at least you can get it running sooner than later.

Chair Case – asked Mr. Chumbley where do you turn the water on?

Mr. Chumbley – the water is distributed from the filter station into the eight-inch main line. The kuleana 4-inch hookup line has its own separate control valves.

Chair Case – that Mr. Atherton (and thank you very much, Mr. Atherton for your help with this) fixes that valve and then you tell Mr. Chumbley it's ready and Mr. Chumbley that day turns it on, is that right?

Mr. Chumbley – agreed.

Chair Case – asked on the comfort of the way submittal is drafted.

Mr. Chumbley – it's my understanding Chair; the responsibility lies with Waikapu Properties for that line at after the filter station.

Mr. Uyeno – ask for clarification of Mr. Atherton and or Mr. Ting, regarding replacement of the meter at the filter station where it drops to the 8-inch main line.

Mr. Ting (Waikapu Properties) – that meter is out-of-order, and as soon as we have it, we'll get it put in as it was new to us, it could be a month; but if water is that much more important, I feel we should turn it on, but we do have it on order.

Mr. Atherton – there's been delays on orders and supplies.

Deputy Manuel – proposed amendment to the motion; to meet the intent of getting water to the kuleana farmers immediately is that once the CLA valve is installed, water shall be turned on and that in the interim while that meter is being ordered and coming that we work with the kuleana users to measure the volume and the way it's designed, they could do a bucket measurement to determine the quantity of water that is flowing while the meter is being installed.

Mr. Chumbley – clarified there's 2 meters in this new system. The first meter is located just below the filter station at our distribution point. The second meter is located on the 4-inch tap in line, which will deliver water to Mr. Suzuki and the kuleana users just prior to Mr. Suzuki's lateral. That one I understand that Waikapu Properties has that meter, and that meter will be installed at the time that the CLA valve is installed; so, it's the second meter up at the filter station at the top is the one that's causing some confusion.

Deputy Manuel – if that is the main quantity being measured is being met, the majority of the water that's delivered will be measured at that new 4-inch meter off of the lateral in the interim the remaining quantity that is measured at that very top by the filter station is to determine the amount of water that Waikapu Properties pulls as an aggregate minus the kuleana users. From my perspective, I'm comfortable working with Waikapu Properties to ensure that they put in that meter and as soon as possible to start to determine how much water they're using.

Mr. Chumbley – 1,875 gpd

Deputy Manuel – it's a small amount of water compared to the total amount coming down that pipe and knowing that number is de minimis compared to the quantity flowing to the South kuleana 'auwai and that meter in place is sufficient to turn on that system; that would be my recommendation.

Chair Case – asked Deputy Manuel to repeat the modifications to the recommendation on page 15 & 16 of the submittal.

Deputy Manuel – noted there's no need to amend, as the language is there that address the main issues brought up and have been addressed (item #4). Item #3 which is WWC to provide the 0.272 to that filter station and the meter is installed.

Mr. Uyeno – added to amend item #4; to have Waikapu Properties to notify CWRM upon installation the flow meter at the sand filter station once that's received and installed.

Chair Case – added also to notify Wailuku Water Company.

Deputy Manuel – to add an item #5 that once the CLA valve is installed that water shall be provided immediately to this system. That's the biggest hang-up to get water to the users.

Commissioner Katayama – asked Mr. Atherton, has he pressured tested the 8-inch line? And at the pressures you're going to charge it with?

Mr. Atherton – we've been using it for a long time. We reserviced the 2 pressure reducing valves. The line hadn't been really maintained very well by Kumu, so we went through the whole system.

Commissioner Katayama – commented there's no issue with testing the line after you install the CLA valves.

Mr. Atherton – we'll pressure test it and hoping in a couple of days. We'll turn it on as soon as it's done if we got permission.

Chairperson Case called upon oral testifier who joined in the meeting late

PUBLIC TESTIMONY (CONT'D)

Ms. Clare Apana, Sierra Club Maui – I would just like to go on the record for Sierra Club Maui and Mālama Kakanilua, that we support the Kuleana water owners and really, I'm happy for the result. Thank you very much to Mr. Atherton, Mr. Ting for your help and support of the kuleana water users. The question of 174C, I don't know if it's been answered very clearly but I think that's an important responsibility for the Water Board, an important clarification for all of the kuleana water users, water owners on Maui. Thank you very much for moving forward and a solution that will hopefully not have to bring all of these people back to your board.

(end of public testimony)

021522 00:48:12

MOTION: (HANNAHS/KATAYAMA)

To approve B-1 as amended.

UNANIMOUSLY APPROVED

CASE/BUCK/HANNAHS/KAGAWA-VIVIANI/KATAYAMA/SETO

Commissioner Meyer recused self from vote

RECESS: 9:52 AM

RECONVENE: 10:02 AM

021522 00:59:35

B. ACTION ITEMS

2. **Approve Interim Water Use Permits to Mary Ann Velez (Higa) (SWUPAs 2241/2242N), Jordanella Ciotti (SWUPAs 2247/2248N), and Greg Ibarra (SWUPAs 2245/2246N) on the Wailuku Town Kuleana ‘Auwai and Order Wailuku Water Company and Mahi Pono, LLC to Implement Certain Actions for Commission Staff to Assess Water Loss, Nā Wai ‘Ehā Surface Water Management Area, Wailuku, Maui**

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

Mr. Uyeno read the summary of request and stated that staff stands firm on its submittal as submitted and notes that the exhibits from the January 18, 2022, briefing item A-3, as well as written testimony are attached to the submittal and are available online. Mr. Uyeno then read staff's recommendations #1 through #4.

021522 01:03:14

PUBLIC TESTIMONY

Ms. Mary Ann Boyle Velez, Wailuku Kuleana ‘Auwai User – I just wanted to testify and confirm that we don't have any water coming down right now, and I was told that this process that we're requesting, will allow everyone to know how much water is coming down our ditches to see how much water they need to get to our property because we haven't had any water since the siphon broke.

Mr. Robert Street, Wailuku Kuleana ‘Auwai User – I went through this staff and also I went back to the YouTube that happened last month and I'd just like to make a correction on a statement that I made about the beginning point of Wailuku Town ‘Auwai system coming off of the Waihe'e Ditch, and I misspoke that I said 400 meters should be towards Waikapū, the Hopoi Chute and they both end up down here where we are at Kalua Road, and I take that correction for the Commission.

On the summary of requests, you're asking Mahi Pono to install a berm, and I am questioning that because there is really nothing wrong with Spreckels Ditch and how it flows. The reason why the water is coming back here is because there's no water being dropped in after we're using it on Kalua Road which would normally flow towards Waikapū. So, I don't think at this point it's necessary that Mahi Pono do anything and we let the system, once we get the water back, let the system correct itself.

On page 4 you have the SWUPAs for Ka'anapali Kai and Vernon Bal as well as Mary Ann Velez, Jordanalla, Ciotti, and Greg Ibara. I just want to inform you that Vernon Bal,

even though that water rights haven't been distinguished, they're still active and well and the person that bought that property is Jerry Cook; and he is very much interested in reactivating the water rights just to give you a heads up on that and he is right across the street from where the midpoint valve is located.

On page 5 the last paragraph there's a quote that the Commission staff also received an email from Mr. Chumbley the distribution valve located on Imua Family Services property had also been tampered with and the main valve was found to be closed nearly all the way. On January 24th Chumbley forward an email from Mr. Dean Wong, of Imua Family Services, implying that Mr. Street has been making "his way up our property and turning the water pumps on the property because he does not know what..." I'm not going to go any further. I have no idea what this gentleman is talking about.

One of my recommendations that I sent to Hōkūao Pellegrino, is that someone or some other Hawaiian scholar, educate these occupants of 2471 Main Street, Wailuku Water Company and the Commission of Water Resource Management what the word kuleana means. Including what kuleana lands mean, kuleana water right, and what kuleana alahele e hiki aku ai means; and that is your implied easement.

I have a right, I believe, with that implied easement to access any part of the Wailuku Town 'Auwai system. We did not give up our access rights to the Kama 'auwai, even though it's not functioning at this point. We have another system that has been put in place and I'm asserting we have a right to access that system as part of the kuleana concept. To make things clear I've contacted the Public Works Department. There is a steel plate at 486 Kalua Road on the mauka side. I've asked them to identify it and what its usages are. That is an unknown system on our street that needs clarifying.

I have a problem with the Commission and team Manuel understanding that the kuleana water users have a first right, if they're growing taro, to water. It's not Mahi Pono, Tropical Plantation, MMK, Pohakulepo Recycling, and Wailuku Water Company or whoever they're selling water to, Ka'anapali Kai. They are not the first ones on the list, we are those that are actively growing kalo; and that has not been recognized and acknowledged by the Commission. Because if it had, we wouldn't be without water for the last 4 months, our system is totally dried up. It's jammed up Spreckels Ditch; the lo'i is dead, everything is gone.

I point the fingers squarely at Avery Chumbley and Wailuku Water Company. I'm just sitting to rethink about Mahi Pono and that berm, get the water flowing again. Get the baseline data that everybody is seeking to determine exactly what flow that we need and take it from there; but to cut us off. I'm done, I've had it, I don't know what else to say. Are we going to get compensated for the loss of our water and the damage that is done?

We need to just get the water back into the system and get it flowing and take it from there, but you have to recognize that we have appurtenant water rights and they need to be respected and they haven't been. One more statement, the person or an entity on Kalua Road that has chosen not to exercise their water rights, that doesn't mean their water rights are extinguished; they just didn't go through the process, and I'd like that entity to be recognized even though they didn't go through the process, they haven't been allocated any quantity of water. They're still relevant in the equation of what happens which they're entitled to,

because they have appurtenant water rights and when they do decide to exercise it, they need to go through a process.

Mr. Avery Chumbley, Wailuku Water Company – Thank you Chair Case and Commissioners. I want to first start by saying that Wailuku Water's obligation under the D&O, is to deliver water to the designated distribution points and that's exactly what we're doing. The implementation beyond that point seems to be a lot of the issues that we're all facing you and us, on the dysfunctional 'auwai which are the responsibility of the kuleana users and the individuals off those 'auwai. We're delivering water at the distribution points where we're obligated to do so.

In regard to the recommendations from staff, #1 and #2 are implementation issues and the only comment I would make is that you give the kuleana users clear guidance and specificity so there's no confusion on what you're asking them to do. With regards to item #3, I do have some concerns about the 60-day period and the 500 gallons per minute which could be as high as 720,000 gallons per day, released into the 'auwai; that's more than 9 times the allocated amount to those kuleana users under the D&O.

From September to December 5th, Wailuku Water was delivering at the distribution point the required amount of water. On December 5th, we had the storm. Waihe'e siphon was shut down which meant there was no water coming through the system at that point. On January 7th, that siphon was repaired, and water flows were restored.

From January 7th to today, that's roughly 6 weeks and Wailuku Water has been dropping the water at the distribution point that it's required to deliver; it's just not making it to the bottom.

There are significant decreases in the flows in Waihe'e River. On January 1st through today we've seen constantly lower than normal 38-year median daily flows, with the exception of January 12th of a spike event of around 195 million gallons of flow. Delivering water at 500 gallons per minute under that six-inch line that comes off Waihe'e Ditch, which valve is always left open and not adjusted, could result in a significant flow through the 'auwai that's unnecessary water that could be considered waste. The 'auwai is basically wetted already to do a 60-day period and only call for at least one seepage run, makes no logical sense.

If the Commission and the staff wants to do seepage run and loss measurements, we're happy to work with the staff during a two or three-day period prior to the designated date, will open the valves all the way, the flows can saturate the already wet 'auwai and flow measurements can be taken. We don't need to do it for 60-days; we're in a water shortage and to be delivering that much water to this 'auwai will cause more problems than what the staff realizes. That concludes my comments and I'll leave any other comments to the attorneys for clarification.

Mr. Hōkūao Pellegrino, Hui o Nā Wai 'Ehā – Aloha Chair and Commissioners. As you can see this is a very complex issue. Last week it got a little bit more complex. I notified Deputy Director Kaleo Manuel that here are other undisclosed water uses on this system that Wailuku Water Company did not provide. In the Kama 'auwai going back towards Vineyard Street, is a pipeline that has been there for more than 40 years. This pipeline was live and

actually feeding non permitted but appurtenant rights users on Vineyard Street and along Main Street going up towards 'Iao Valley.

When I was informed by Mr. Wong of the Imua Family Services as they were trying to clear Kama 'auwai for their garden space line, a pipeline broke and immediately the landowners on Vineyard Street contacted Wailuku Water Company to find out what was going on. They backtracked and saw that the pipe had had been broken and Imua Family Services was unaware that this pipe even existed and that the water was flowing in that system to other users.

There's a lot of other challenges that are ongoing in this, while we the Hui supports the recommendations with some possible minor changes to item #3 related to Mahi Pono, there's a lot of other issues that are not fully being disclosed in regard to this 'auwai. According to documents in terms of the previous land owner of Ka'anapali Kai, an agreement with Wailuku Water Company was that they were to get unmetered amount of water in perpetuity, and that particular decision and order or agreement continues today.

One of the challenges we have is not that Imua Family Services shouldn't get water because they should absolutely get water, but I think there's issues around pressure. Amongst how much they are using at any given time which is above, but why is that there's no regulator above the system that regulates the use going through that system along with the system that goes into the Kama 'auwai because some of the kuleana users below the second valve are getting short changed.

Mr. Chumbley alluded to the fact that we shouldn't be wasting water and having 500 gallons per minute is going to be too much but prior to 4 months ago, water was reaching these kuleana users unmeasured. Not only saying that we have to provide a certain amount of water to these folks based on the decision in order, but yet, before that he was dropping unmeasured amounts of water that could be 200,000 or 400,000, we don't have any idea, which is why I think a full of 60 days seepage run and having these valves completely open to study what is occurring, is the right solution.

We need to figure out what is happening not only between that second valve and where the water drops up on Kalua Drive, but also the fact that this 'auwai hasn't had water for 4 months; so even if they were to open it up for one or 2 days, it's going take a lot of water to reach the end user, which is Mr. Ibara on Kalua Drive, due to the fact that there's going to be a lot of saturation that needs to occur. It's not black and white, it's complex but I think the Commission and staff putting forth these recommendations is the right thing.

Talking of waste, we're talking millions of gallons of waste that is backing up in the Hopoi Chute on a daily basis in a completely derelict pipeline that is just leaking water from the Ibara's all the way on pass Wai'ale Drive going to the Wai'ale Reservoir that feeds Mahi Pono. One of the corrections I'd like to make on record is and liked to be addressed is that I believe in the recommendation, says to have a berm built above Ms. Velez's property; but if there's any berm or fixing of that pipeline, it should be from the Ibara's going towards Mahi Pono. We don't want the water continuing to back up all the way past Mr. Streets to the Velez's property where it currently is; and it's constantly stagnant, it's stink, got tons of mosquitoes, it's a big issue. Hopoi Chute needs to be fixed or there needs to be a berm installed much lower.

Again, going back to this particular issue of the kuleanas, there's nobody on the system that's paying for water so there's is a challenge there in terms of who's maintaining and the priority that Wailuku Water Company may not be putting on the system to ensure that all users are provided with water. The Hui would recommend that the endpoint not be the way at the top or the beginning point where the Waihe'e Ditch is, but that where that water comes out on Kalua Drive. I'd like the commissioners to have this discussion about these complex issues as well as these unregulated or undisclosed users that Wailuku Water Company knowingly had on the system but didn't share that information, Mahalo.

PUBLIC TESTIMONY (CONT'D)

Ms. Clare Apana, Malama Kakanilua – Mahalo Chair. I would like to address the Commission from Malama Kakanilua and hearing the testimony we 100% support the kuleana owners and the appurtenant rights that come with each generation to have their rights affirmed by this Commission and the DLNR, and their rights continue in such a way that there's not a fight for it every single generation.

I'd like to add that we support what Mr. Pellegrino just testified to that it's seems like this is a such a mess and it really needs to be straightened out. What doesn't change here is the fact that water keeps going down to South Maui. That's water that's supposed to be in the Wailuku moku by traditional rights and by plain common sense. Wailuku moku is growing, too, and we have water rights and are they addressed in this as time goes on and south Maui keeps taking water, unrestricted without having any kind of water plan? I mean you're talking about a little bit of water for people and you're willing to give Grand Wailea over 1,000,000 gallons a day. There's something wrong with that system. We should be serving the people of Wailuku moku first with Nā Wai 'Ehā.

We have kuleana water owners who are not being serviced, there should be no water that should be going out of our moku; I'd like to consider that also, because no one makes South Maui responsible for how much water they use and they keep taking and these people who are farmers have the first right to this water, and they are not getting anything. Thank you very much.

Mr. Isaac Moriwake, Earthjustice – Mahalo Chair and good morning again Commissioners and everybody. I was just going to stand on supporting the staff recommendation and make myself available for any questions. I understand first of all, that there may be some modifications of the exact approach, but I think the intent in the direction here is valid and similar to what you just approved in Waikapū; get the water flowing, measure it if you have to, and then we figure out the longer term is what I was going to say in total. However, Mr. Chumbley made some comment about kuleana responsibilities that I am compelled to respond to.

I heard some comment about kuleana owners having the responsibility for these dysfunctional 'auwai and that's just disingenuous. We're talking about established record in this case going back decades at this point but even decades before that. It's the kuleana's responsibility to maintain their 'auwai traditionally, yes, that's the principle, if that's their 'auwai. Here, we're talking about plantation ditches that the plantation put in and then

imposed on these kuleana owners.

If you recall last month Wailuku Water Company said themselves that their predecessor put in these water courses, ditches and then modified it over the years. Those references date to the 50s and the 70s. Same thing happened with Waikapū. I believe Mr. Pellegrino submitted Mr. Santiago, the former Wailuku ditchman's testimony, in this case, this record I'm talking about how there's two parts of the Waikapū 'auwai. The top part that the plantation put in, and then it drops into the traditional part further down which we're going to reestablish today hopefully. That was the traditional 'auwai and that's why the Waikapū community, the south side wants to reconnect that traditional 'auwai directly to the stream.

The point here is that this is not a traditional 'auwai. This is a plantation-imposed ditch system that service their fields first, and then because they had that obligation that was very clear from the very beginning that they had to service to kuleanas they incorporated the kuleanas in their ditch because they had no other choice. I just want to make very clear but because this is a longer-term issue that I mentioned with regard to Waikapū, it's going to come up. I think there's been somewhat of a wrong turn in sort of the Commission's understanding at least on paper, about kuleana responsibilities. We have to separate that traditional obligation to maintain your 'auwai versus what the water company and the processors have done to these kuleanas and put them in the situation. Basically, leaving them on an island, as far as access, and then stranding them there.

I want to emphasize in conclusion, this was never an issue in this case going back decades in why this case is impending, and decades even before then. You know that there was a ditch man Mr. Kamasaki who's still cut off from his kuleana water (he passed away) but his descendants in Waikapū, still no kuleana water access. He testified in this case 10 years ago; by understanding what the plantation was, kuleanas always took first. That was his job as a ditch man.

This was never an issue going back decades, and I sympathize with these kuleana owners including Mr. Street. This is unprecedented as I've mentioned in previous testimony and at this point, it just looks like harassment and spite. I heard from Mr. Chumbley he wants to work with CWRM, where was that earlier? Where was that constructive let's just work together? If that's his intent right now, then, so be it, but I just want to make very clear that this attitude of it's the kuleana responsibility for these dysfunctional ditches, let's eliminate that at this point. Thank you very much. I'm available for questions.

(end of public testimony)

021522 01:29:57

QUESTIONS/COMMENTS

Commissioner Hannahs – suggested two amendments to the recommendations and asked for Deputy Manuel's comments. 1) on recommendation #3, say "up to 60-days"; so as to not waste water and provide some wiggle room as necessary.

Deputy Manuel – it's doable.

Commissioner Hannahs – 2) on recommendation #4, regarding placement of the berm, strike the language that specifies “...upstream of the Velez-Higa property...” leave it blank or say, “put in a berm that prevents the stagnant conditions” or leave to your discretion and say “at a location determined by staff”.

Deputy Manuel – we’re open to that as well.

Commissioner Hannahs – the Commission doesn’t need to be telling you guys where to do that, you can figure that out in the field. If it’s acceptable (Chair), I’d offer those as amendments.

Chair Case – are you making a motion to that effect?

Commissioner Hannahs – I’m making those amendments but have a question with regard to non-permitted users; does it need to be in the recommendation or can just be investigated and bring back?

Deputy Manuel – we will investigate, it doesn’t have to be in this submittal explicitly and that’s part of our normal enforcement investigation that if unpermitted uses are happening, then we must follow up with those and require them to get and go through submitting a permit for their use.

Commissioner Katayama – (to Dean) asked on recommendation #4 of the rationale of it in putting in that berm?

Mr. Uyeno – deferred to Deputy Manuel.

Deputy Manuel – Speaking with Mr. Mark Vaught, who manages the system for Mahi Pono, and as indicated in testimony, the Hopoi Chute does drop water into Spreckels Ditch. There was water that was backing up towards the Velez property which we noticed in our site visit. And talking with Mahi Pono, I asked if they’re open to working with us (CWRM) to put in a berm or sandbags within the ditch to ensure water continues to flow down the system and not backflow. So, where that’s located and how it happens, we’re open to working with Mahi Pono. The amendment by Commissioner Hannahs is helpful for us to do that.

Commissioner Katayama – asked if that residual flow comprehend the additional water that’ll be introduced?

Deputy Manuel – that was built into the submittal; it includes the Hopoi Chute backflow as well as the added water flow during the 60-day period. Noting that a primary challenge with Spreckels Ditch (per Mahi Pono), is they aren’t pulling water from Wailuku into the ditch as before so normally water would continue to flow through the system, so there’s a natural build-up at the head of the ditch and is the back-up what we’re seeing.

The intent with the flow-through the kuleana properties that will add flow into the ditch also with the Hopoi Chute water, it needs to be kept moving downward and toward Mahi Pono and will work with them. The intent is we’re trying to be explicit as possible so there’s no confusion what we’re trying to accomplish; but in the effort we were too specific, and the recommended edit is welcomed.

Commissioner Katayama – noted the berm may not be needed but will leave up to staff to figure it out.

Commissioner Kagawa-Viviani – asked on recommendations #1 & #2 and on Mr. Chumbley’s comment about being more specific on how that gets implemented. Is that something staff will work with the kuleana users to help in ensuring percentages?

Deputy Manuel – staff will work with the kuleanas and system users to figure out how best the system operates. We identified item 2 because at the distribution point on Kalua Road where the three properties take water, there could be modifications to ensure those that have larger quantities per the Decision & Order get that percentage. The prorated amount was based on how much the Commission originally intended to award to each of those end users while honoring the Commission’s intent in the distribution of water and management of the system.

Commissioner Seto – asked if a permit is needed for installation of the berm in the ditch?

Mr. Uyeno – no; it’s managed by Mahi Pono and is a man-made feature.

Commissioner Seto – asked is it considered a water of the United States?

Mr. Uyeno – not to my knowledge.

Commissioner Seto – asked to check with Army Corps Regulatory Branch to see if that Department of Army permit is required and that is no NPDES permit required for installation of the berm.

Chairperson Case asked for a motion

021522 01:38:36

Commissioner Hannahs – moved to approve the recommendation subject to two amendments. On recommendation #3-insert “up to 60-days” and further amend recommendation #4-to order Mahi Pono, LLC to make improvements in Spreckles Ditch to prevent stagnant conditions.

**MOTION: (HANNAHS/KATAYAMA)
To approve B-2 as amended.
UNANIMOUSLY APPROVED
CASE/BUCK/HANNAHS/KAGAWA-VIVIANI/KATAYAMA/SETO
Commissioner Meyer recused self from vote**

Chairperson Case thanked everyone.

021522 01:39:58

B. ACTION ITEMS

- 3. Delegation of Authority to the Chairperson to Modify Any Orders of the Commission in CCH-MA15-01, Surface Water Use Permit Applications, Integration of Appurtenant Rights and Amendments to the Interim Instream Flow Standards, Nā Wai ‘Ehā Surface Water Management Areas of Waihe‘e, Waiehu, ‘Īao and Waikapū Streams, Maui for the Purpose of Allowing for Implementation of the Decision and Order**

PRESENTATION GIVEN BY: Deputy Kaleo Manuel, Commission on Water Resource Management

Deputy Manuel noted he stands on the staff’s submittal then read the staff’s recommendation #1 and #2.

QUESTIONS/COMMENTS

Commissioner Buck – noted his full support of item B-3 and thanked Deputy Manuel and staff in their hard-work in trying to implement the D&O of the Commission and noting the many hours spent talking about the implementation and issues in regard to Nā Wai ‘Ehā.

021522 01:42:12

PUBLIC TESTIMONY

Mr. Avery Chumbley, Wailuku Water Company – Thank you Chair Case and Commissioners. Good afternoon again. I’m going to speak more in a lay term and defer to my attorneys to address some of the other concerns. I don't believe this is necessary because under 174-C and HAR 13-167, it already gives the Chair and the Deputy Director significant powers to do implementation.

My concern from my lay perspective is the difference between the modification of the D&O and implementation which are two distinct different items. With that, I’ll end my testimony, thank you.

Mr. James Geiger, Counsel for Wailuku Water Company – Good morning, Chair and Commissioners. I think Avery hit the nail on the head, and that the concern we have is modification. It's clear that the Deputy Director has the ability to implement decisions of the Commission. The concern is passing down the ability of the Commission who has issued an order, to delegate the ability of the Commission to change that Order, that the Commission has entered. It's one thing to implement a decision and a policy that the Commission has made. It's a separate thing to say you can modify those decisions.

So, we would ask that the Commission respectfully consider removing the language about modification but go ahead and make it very clear that the Chair and the Deputy Chair has the ability to make implementation decisions and orders consistent with what the Commission has adopted in its decisions and orders. If there are any questions, I'd be happy to answer them.

Mr. Hōkūāo Pellegrino, Hui o Nā Wai ‘Ehā – Hui o Nā Wai ‘Ehā supports the recommendation for delegation of authority to the Chairperson to modify orders of this Commission and Decision and Order, Mahalo.

Mr. Isaac Moriwake, Earthjustice – Aloha again. Earthjustice supports the staff recommendation that really needed flexibility and responsiveness. I mentioned this in a previous item with whether it's modifying or bending an order that's up on appeal, or just simply issuing your orders, I think the intent is the same here which is to recognize the Chair and the Deputy existing authority to implement the Commission's orders, I think that's the intent. As you mentioned previously, maybe we just need to make it crystal clear to that extent we support this action, thank you.

Ms. Joycelynn Costa, Maui Resident – Maybe I misunderstood, which Chair? Who is it that the delegation is giving full authority to?

Chair Case – replied, the Chair of the Water Commission.

Ms. Costa (continued public testimony) – Okay, I would be in support with the kuleanas. My experience on boards and with authority as a member is sometimes for me the fiduciary responsibility of each member. I sometimes hesitate to defer the responsibility of my fiduciary to just one person. But in this case, listening to the kuleanas who should have first rights and first say, I would defer to what they recommend, and I would support the measure. Thank you.

(end of public testimony)

QUESTIONS/COMMENTS

Commissioner Hannahs – in response to Mr. Chumbley's concerns, I want to point out that the recommendation does provide a second point and that these modifications will be reported back to the Commission. So, at some point of which the Commission feels the Chairperson is overstepped, we have an ability to intercede.

Commissioner Kagawa-Viviani – asked for clarification of technical difference between “implement versus modify”

Chair Case – called upon Deputy or AG and added the purpose of this is to implement the decision that the Commission made when they issued an order after years of the complex order and work, to the extent this involves tweaks to the system to make sure that everything is working right may be considered an implementation.

If it's something like the situation where in order to get water to the ‘auwai users, the amount of water that is delivered to a dysfunctional system needs to be for the time being, more than what the Commission originally ordered; but it's the same as what was going on before so

that we can figure out what the problems are here and try to do the solution.

That's a technically a difference in the order itself. The amount of water that Wailuku Water Company is to deliver at the delivery point.

Commissioner Kagawa-Viviani – noted it's like in B-1 and B-2; the process of implementation.

Chairperson Case asked for a motion

021522 01:49:41

MOTION: (BUCK/KAGAWA-VIVIANI)

To approve B-3 as submitted.

UNANIMOUSLY APPROVED

CASE/BUCK/HANNAHS/KAGAWA-VIVIANI/KATAYAMA/SETO

Commissioner Meyer recused self from vote

RECESS: 10:54 AM

RECONVENE: 11:08 AM

021522 02:04:58

B. ACTION ITEMS

- 4. Accept Chairperson's Recommendation to Designate the Lahaina Aquifer Sector, Maui as a Surface Water and Ground Water Management Area under HRS Section 174C-41, and to Notice and Hold a Public Hearing**

PRESENTATION GIVEN BY: Deputy Kaleo Manuel, Commission on Water Resource Management

Deputy Manuel read the summary of request and noted we are at #3 of the Designation Process with steps #4 and #5 to follow. This stage is part of the process and provides public ample time to continue to participate, collect feedback, receive testimony, add additional data as it may be presented. Since last month we received over 30 testimony which all were in support and 2 with concerns or objections.

A presentation made to the Maui Board of Water supply which action was taken on the item in support. Written testimony received from Chair Frampton about his concerns, but ultimately his support to keep the process moving forward. A presentation will be made on 2/22 to Maui County Council to their committee that focuses on water and CWRM are still engaging in this process and coordination at the county level and to keep this conversation moving forward.

Noting that staff stands on the staff submittal but referenced the precautionary principle that the Commission does have the authority to regulate, administrative control over water

resources, both surface and groundwater and manage it holistically in an integrated fashion.

Deputy Manuel thanked all who submitted testimony and acknowledged the traditional knowledge and the lived experience testimonials from practitioners and kalo farmers within this region that create the data set to help inform the decision making of this Commission.

Both the summary of justification and staff recommendation was read.

021522 02:10:30

PUBLIC TESTIMONY

Ms. Tamara Paltin, Maui Council Member – Aloha Chair and Commissioners. I'm the West Maui resident representative on the Maui County Council. First, I would like to express my strong support of groundwater and surface water management area designation for the Lahaina aquifer sector. Your commission staff submittal shows designation is sorely needed in West Maui. Climate change is already having drastic impacts on our west Maui community reducing rainfall and extending drought conditions. We're currently in drought right now despite heavy rains in December. We are at the point of serious concern for long-term water resources, and we are regularly discussing the need for more wastewater reuse in our council meetings.

Unlike what Director Pearson said, we should not go slow in protecting our resources. We need to act quickly in the best interest of future generations. People in West Maui are concerned now and do not want to wait for all of the designation triggers to be met. We want to be proactive in protecting these resources, especially with so much planned development coming to West Maui in the future.

We have 289 low-income units being built right now. We have over a 1,000-units at Pulelehua that have already received approvals, and it's just growing. Those are just affordable components. Pulelehua is half affordable and half market. From water resources in Nā Wai 'Ehā, we have learned that groundwater withdrawals in one aquifer area can impact another. The best way to protect our groundwater resources for the future is to designate all of these proposed areas and manage them together.

We've also seen when things are piecemeal designated, people jump from one source to another. Thus, if one is impaired, they flood the next source that isn't. We also know these aquifer boundary lines are arbitrary. There is no real distinction between aquifers. All of these wells are like straws in the same cup. Similarly, there is no real distinction between ground and surface water resources. Managing one without closely managing the other, makes no sense when this is by far our most precious resource; same concepts if we only manage the ground, everyone will jump to surface and vice versa.

The State Water Commission is the best entity to oversee the responsible use of water to ensure it is in line with the law and the public trust. You can lean on the precautionary principle where there's scientific uncertainty you should choose in favor of protecting the resource.

I would also like to thank the West Maui community members who have testified in support

of designation at previous Water Commission meetings and the County Board of Water supply meetings. Many of them have the highest rights to water under the law, and yet they have the least access to water. Their rights and kuleana deserves to finally be protected. At the community member's request, I will be introducing a resolution in the next few weeks on the council floor. In advance of that resolution the Council has invited the Water Commission Staff to present about the role of designation in protecting our ground and surface water resources. Mahalo, for all you do for our wai. If we have time, I am of available for questions, Mahalo.

Dr. Jonathan Scheuer, behalf of Dept. of Hawaiian Home Lands – Aloha mai kākou. Good morning, Chair Case and members of the Commission. I am here on behalf of the Department of Hawaiian Homelands. We submitted written testimony last month during the briefing on this matter and we stand by our support of moving forward with the proposed designation process, because it enhances the Commission's ability to defend DHHL's rights in the resource going forward.

Only thing, I would add is that we really appreciate the staff submittal specifically addressing the testimony that has been provided so far. I thought that was a very valuable addition to the analysis and we're grateful for the staff, and the Commission for including that. I'm more than happy to answer any questions related to DHHL's interest in these matters.

Mr. Ke'eaumoku Kapu, 'Aha Moku o Maui – Aloha Chair Case, Water Commissioners and Deputy Director Manuel. I'm a resident of Lahaina where my 'ohana has stewarded 'āina kuleana in Kaua'ula Valley since time immemorial. I have the Land Commission, Royal patent and TMK numbers in my written testimony before you.

We have waited 20 plus years for the Chair's recommendations and are grateful that today we have the potential to move us towards designation of our aquifer sector as surface and groundwater management area. I remember 20 plus years ago, our 'ohana went to EarthJustice and met Kapua Sproat for the first time to do a site visit with kuleana of Kaua'ula Valley, thinking maybe can kōkua with our water challenges. Nope, because Lahaina was not a water management area; couldn't do what we needed for our kuleana.

I never understood the significance for a long time, until today. We fought long and hard for the industry flow standards and for Kaua'ula in particular. The planning resistance from land companies across West Maui who were claiming our 'āina. Now, despite all of Ayrton's hard work and this commission's having adopted those instream flow standards, still get pilikia and the amount required by law are not in our stream. The companies are still taking all the water.

We know, we're right next to the hydro-plant. But too long we have raised the same issues over and over again, waiting for something to be done. This is our lives that we are talking about, even though our 'ohana has kuleana and the rights that go with it, we have no water from our stream. Sometimes we have no water for days to even bathe our babies. We have to bathe them in buckets. The biggest nightmare is our kalo getting pocket rot because no intake management or cleanup. Sometime for months, we need we clean when we need to as

always and have for generations from my great-grand kupuna and my father's time; and now to my me and my son.

Now we are threatened that we are tampering with their system, 'auwe! Since when did our public trust become theirs? So, we no longer touch, for fear of more complaints from each company. Now we call their manager to get their asses up here to fix it. But let me tell you, the kuleana who are supposed to have the first right to water, always need to wait.

I shared with you in January and I telling you again now, in Kaua'ula across West Maui we have serious conflicts of our water use, historic ones that are continued to the present; that's one of the criteria for designation. Your staff noted that in the submittal. Please support your staff and please stand with us the community and beneficiaries of the public trust by designating our community through farmers kuleana and call of words, with all the rights the Water Code is supposed to protect; finally, we have a chance to try. We have suffered enough. Please pass, Item B-4. Mahalo and I'm happy to answer any of your questions.

Ms. Karyn Kanekoa, Hui Nā Mamo Aloha 'Āina o Honokōhau – Good Morning. I'm testifying on behalf of Hui Nā Mamo Aloha 'Āina o Honokōhau, a 501 C-3 nonprofit made up of one Honokōhau Valley residents and lineal descendants committed to protecting the wai and restoring lo'i throughout Honokōhau valley.

Mahalo nui for this opportunity to give testimony today in support of the Chair's recommendation to designate the Lahaina aquifer sector as a surface and groundwater management area. As a Hui we're dedicated to protecting our most precious resource wai. When it comes to protecting and managing wai there is no such thing as being too cautious or prudent. In Honokōhau, we have experienced deadly, decreasing rainfall and drought in recent years, anticipated declines in rainfall based on future projections will negatively affect the groundwater recharge and stream flow, resulting in less water availability, therefore, putting kalo cultivation and stream life at risk. We also need a factor in the projected growth and development in West Maui.

We believe the designation and the water use permitting that goes with it, are the best tools to address these challenges. We strongly believe that this designation happen now before it's too late. As Jeff Pearson stated in the last meeting, there's not a lot of water in West Maui we're right near the edge now, with what we provide for our customers in West Maui.

So, I ask you, what's the harm in enhanced management and protection through integration of surface and groundwater uses? With the ongoing serious disputes over water issues or water use in our community, we support designation because it is necessary for proactive management of our water resources. Use of water for kalo cultivation is a protected trust use which is supposed to have, like Uncle Ke'eaumoku, said, the highest protection under the law. The designation of the whole Lahaina aquifer sector from 'Ukumehame to Honokōhau as a surface and groundwater management area, will help the Commission balance requests for water and ensure that public trust uses, and native Hawaiian rights and practices are protected.

It wouldn't make sense to leave Honokōhau aquifer out of the management area; and we

know firsthand from living there, in farming kalo, that designation is necessary in Honokōhau in order to ensure that we will have wai in our stream for generations to come, and that our mo'opuna and hanauna e hiki mai 'ana will never be forced to stop farming kalo because of lack of water in the stream. Mahalo nui for taking the time to listen to my testimony today.

Ms. Lauren Palakiko – I'm a resident of Kaua'ula Valley. I'm born and raised right across the street from where the muliwai is outlet here. This place has always been a big concern for me, and much more now that I'm the wife of a kalo farmer here. Mauka to makai connectivity is imperative to our native ecosystem. However, even with a breaking connectivity between the dam and the siphon where we get our water for the kalo. Kaua'ula Stream was filled with life such as or 'o'opu, 'ōpae, prawns and more. There is enough water coming down, that the muliwai was running so much that the GM at Puamana was able to cultivate his own lo'i.

This was probably about 2014-15. On June 6, 2019, our muliwai dried up for the first time that I can remember. Besides after rainstorms, it has not run since then. A week later after the muliwai stopped flowing that whole area was an 'o'opu graveyard. I noticed a drop in the water had occurred after the Launiupoko Irrigation Company had installed a few big blue pumps down the road; they were pumping water up and that's when I noticed our muliwai stopped flowing.

Although I can't prove that these pumps led to the muliwai drying up, I thought it was worth noting that the day after they removed these pumps on October 29, the muliwai did start to trickle water again. This past summer was really hard on the lo'i here. We used to get 1,400 gallons per minute and that was extremely low for our stream and lo'i. Then LIC started running it at 1,200 gallons per minute. Dave Minami, who is the previous LIC Water Manager advises us to email Peter Martin to see if there are any changes that could be made; so, we did, and Peter responded that CWRM's decision was for them to give us a 1,000 gallons per minute. Now, they are currently running us at 800 gallons per minute. The mud in our patches is showing, the water temperature may be rising which all could be leading to rot and loss of our crops. Sometime before 2019 would have been proactive to designate Lahaina as a water management area. It's now beyond crucial for our native practices for our farming and our ecosystem to do so. Thank you for your time.

Mr. Charlie Palakiko – Aloha. I'm a kuleana landowner of Kaua'ula Valley. My family and I have been raising kalo on this land for over 30 years. When we first restart our family patches in the mid-80s, we fed our patches water from holes for years because there was no water in the stream. In the 30-years we restored our 'auwai and got the stream running by negotiating with West Maui Land.

Since then, I've seen the water drop drastically from reaching the muliwai, to now a dry stream killing many stream life such as all 'o'opu, 'ōpae and prawns and also affecting our kalo patches. As of today, water to our patches is extremely low causing dirt to show in them. I called West Maui Land and was told our water is being pinched because their water was running low. I was told the siphon 100 gpm which is equivalent to a little over 1,000,000 gallons a day. This is not enough, and it's been getting worse.

As you can see, we are already running into problems, and they're not complying to the IIFS which they are supposed to be releasing 2,000,000 gallons at the dam, which is not being done at this time. We've been at a standstill for the last 2-1/2 years not being able to expand because of decreasing water flow. This is why we need to be a designated water management area. We need a third party to fairly manage the developer's water they're taking. Thank you for your time.

Ms. Madison Palau-McDonald – Hello, Chair Case, Deputy Director Manuel and Commission members. Mahalo for the opportunity to testify today. I've had the privilege of working with community members in Maui Komohana who are directly impacted by your decision.

I want to express my strong support for designation today. At bottom, designation provides the best opportunity to protect and preserve resources in our new climate reality. Failing to designate will perpetuate the status quo; IIFS will continue to go unmet, well reporting will remain a struggle and municipal and commercial uses will continue to benefit at the expense of protected public trust purposes like a appurtenant rights, traditional and customary practices and domestic uses.

As a native Hawaiian, it breaks my heart to see community members denied their rights protected under Hawaii's Constitution and the Water Code. As a law student, I'm grateful that designation will give your Commission the tools to address these issues in an integrated and comprehensive manner that will ensure that water resources are equitably and sustainably stewarded. Maui County cannot do this alone. So please fulfill your fiduciary duty under our public trust and vote to designate today, Mahalo.

Mr. Erik Meade – Aloha Chair Case and Commissioners. Good morning and thank you for allowing me to testify. I'm a law student at William S. Richardson, and I'd like to offer my praise to the Commissioners and staff for taking the initiative to move this issue forward. You've built an excellent record that provides more than reasonable basis for designation that coupled with the supreme court's recognition that the precautionary principle is an inherent attribute of the public trust domain, further supports designation.

The overwhelming community sentiment is that you've met legal criteria and that the community members feel it's vital. I urge you to stand with the community and your staff and please designate, thank you very much.

Ms. Bianca Isaki, behalf of West Maui Preservation – Aloha Commissioners. I'm here representing the West Maui Preservation Association, a nonprofit based in Lahaina. We submitted written testimony to your January 18th meeting in strong support of designation.

As Council Member Paltin testified, climate change is here. There's a long-term drought in West Maui. We've seen drought combined with diverters to release surface water as we seen it frustrates the commission's IIFS, such that for instance, Kaua'ula Stream is drier than even before the IIFS were amended in March 2018.

As staff noted, diverters are now turning to well-drilling to substitute for stream diversion. Three of the private wells that supply the gentleman's estate in Launiupoko had pump installations in 2020 after the March 2018 IFS Designation. Then on January 26, 2021, Launiupoko Irrigation Company reported curtailment of private wells number 3 due to rising chlorides. This well is fairly high up mauka at 751 feet in elevation. Those 3 wells have a combined 1,100 gallon per minute pumping capacity. In the absence of designation there aren't institutional mechanisms that will prevent these well owners from pumping up to installed pump capacity. Institutional mechanisms are needed to counteract existing use and development pressures to pump more from these private wells.

In Kaua'ula and Launiupoko, communities fought several attempts to stall even more developments, Makila Kai, Makila Farms, Polanui.

The concern that well owners who can increase pumpage will do so or at least imprudently announced plans to do so, is a real concern. This is a long way around to think we agree with the recommendation to examine permitted well capacity as your staff have recommended and considering designation.

Finally, our supporters in Kaua'ula also learned that the West Maui Land Company and the County are planning to install yet another well that hasn't been considered and recently examined a site on the north side of Kaua'ula stream, north of the Dizon kuleana; this is also an additional concern, thank you.

Mr. William Wood – My family and I are Honokōhau Valley residents. We support and accept the Chairperson's recommendation to designate the Lahaina Aquifer sector as both ground and surface water management areas. Living in Honokōhau Valley we have seen firsthand the mismanagement of water use by both MLP and the County of Maui Department of Water Supply.

Here are a few examples. The county had a bridge in Honokōhau Valley that was used to hold water lines above the river. It was originally built by MLP and Jerry McDonald. It was then taken over by the county Department of Water Supply in 2000; The bridge failed in 2018. The county was well aware that the bridge had failed, and the bridge system was obstructing the width of the river. Here's a quick photo. The bridge laying in the river-wall to wall. Here's another one of the bridges in the stream. In 2018 after the bridge failed the county was aware of this, but nothing was done.

During the tropical storm Olivia there was a big flood that came through and a lot of large logs came down and got stuck on this bridge eventually building up a big dam before it broke free sending catastrophic flooding below which destroyed land, homes and lo'i. After the flood, Ayrton Strauch came up to take a look at the area and help us clarify what exactly had happened. After tropical storm Olivia, the flow in the stream was greatly diminished and we repeatedly tried to contact MLP to restore the water flow but did not receive a response.

Meanwhile MLP was wasting the water which was overflowing into the sea at Honokao'o. This is documented in the 2019 wastewater complaint. We are on a little island in the middle of the Pacific, and we should not allow so many straws to take from our cup treating this

valuable resource as a commodity to be bought or sold. When you're looking at who is in opposition of protecting West Maui's aquifers, you'll see the faces of developers looking for foreign money and the people that are responsible for selling the water for those developments.

We strongly support CWRM to designate West Maui as the surface management area as well as groundwater, so that we can be assured that the use of our precious resources will be reasonable and beneficial for the future of our small island, thank you very much.

Ms. Kanoelani Steward – Aloha nui kākou. As a West Maui community member, I support the designation of the Lahaina aquifer sector as a surface water and groundwater management area, and strongly urge the Commission to accept this recommendation from the Chairperson. As stated in the staff's submittal this designation is a way to proactively manage water disputes over surface and groundwater in the Lahaina Aquifer sector, especially since there are established interim instream flow standards that are not being met in West Maui which essential shows that off-stream uses are being prioritized over instream uses.

As you know, designation is another layer of legal protection to regulate reasonable and beneficial uses of water. The Commission has a constitutional duty and as stated in HRS Chapter 174-C, the Commission is to ensure the availability of this precious resource will meet the present and future needs of the people. The climate crisis of the future is uncertain which will directly impact and affect our water sources. The future housing that is planned for the Lahaina aquifer sector will also directly impact and affect our water sources. The current water disputes are already affecting our native Hawaiian practices.

Therefore, designation can only benefit the present and future needs of the people of West Maui. In the staff submittal the Maui Department of Water Supply said that the move to designate is being too cautious. However, I strongly disagree as do many of us community members as designation is a proactive move that can put our public trust resources and environmental protection at the forefront of regulation.

Designation is an important tool to manage water use as it will ensure that all water use in our area is consistent with the public interest. Please hear and internalize our mana'o as we, the community share strong support for the recommendation to designate the Lahaina aquifer sector as a surface water and groundwater management area; Mahalo nui.

Ms. Sanna Kauhane (*via video provided by Ms. Steward*) – Aloha kākou. I'm testifying here today in strong support of this designation. I feel that it is crucial that this surface and groundwater designation happens for all of West Maui as a whole, rather than singling out certain problem areas for sole designation, such as simply the Honokōwai system or the Launiupoko system.

As mentioned in the staff submittal, surface and groundwater here in West Maui are hydrologically very clearly integrated. So much so that it is difficult to draw boundary lines between systems. With that being said, it would be careless to move forward without

managing all of our surface and groundwater together holistically. The recent implementations of instream flow standards have been somewhat helpful to restoring stream flow; but we are now seeing groundwater being taxed more heavily. Increased enforcement of IFSs will only shift the burden further to groundwater withdrawals which will return full circle to further impact our groundwater dependent ecosystems, stream flow and coastal discharge.

Designation will ensure that our region will be managed collectively as a whole, so that we can avoid simply shifting the weight around from one aquifer system to another which could prove catastrophic for future generations to come. Two of our aquifer systems are being threatened. If that doesn't say trigger, I don't know what does, because that says trigger to me. I urge the Commission to take this proactive responsible step in the right direction, Mahalo.

Mr. Kalama'ehu Takahashi – Aloha kākou Chair and Commissioners. Mahalo for opportunity to testify this morning. I'm here to testify on B-4 in support of the designation of the Lahaina and West Maui Aquifers as a as a ground and surface water management areas.

I'm in support because this process serves a holistic and proactive approach towards protecting this precious resource from development as well as climate change and ensuring accountability across the board, particularly those of the land irrigation companies that have historically mismanage this resource as seen in on Willie Wood's testimony, mahalo nui.

Until today, in other informal conversations these companies are still gatekeeping these resources ultimately denying the kuleana landholders as well as other kalo farmers and others wanting to revive these practices such as the Hui Nā Mamo Aloha 'Āina o Honokōhau. As 'Anakala Ke'eaumoku mentioned, there have been years and years of struggle for wai and has severely affected not only their appurtenant right to farm kalo as kuleana landholders, but also their basic necessities to live under 'āina kuliwi, which we should all have the right to as Hawaiians.

As Councilmember Paltin mentioned, there are also housing developments up and coming unless we have a way to hold current developers accountable for the impact on the resource, we're basically drinking the streams dry and all these resources dry. I also wanted to cite a quote by Jeff Pearson referring back to the January 18th meeting saying there's not a lot of water here in West Maui and we are right near the edged in what we provide for our customers in West Maui. To deny the scarcity of this resource is also to deny the claims for necessity of water and needs for this type of measures to be taken. Also, in the January 18th staff submittal referencing the Launiupoko and Honokōwai aquifers of the sustainable yield on page 7 of that submittal says that Launiupoko will be within 115% of the sustainable yield and Honokōwai will be within the 170% range of the sustainable yield.

I don't think that we can really move forward and rely on these unsustainable, and in my opinion, comic criminal practices of mismanagement of this resource for communities and our future. Mahalo nui for your time to the Council Members, Deputy Manuel and CWRM, other community members and 'ohana that have been here. And I wanted to ground truth one of the testimonies earlier. I had the opportunity to visit Kaua'ula to harvest kalo for our

ceremony relating to Makahiki and I would like to say that the water was in fact, very low, and the water did feel warm and so I see this I see this water issue not only talking about our appurtenant rights and for subsistence practice such as farming kalo; but also something that could jeopardize the cultural religious future and the relationship to these resources. I implore you to consider both sides both sides of the argument, Mahalo again.

Mr. Kekai Keahi – Aloha. My family's come from the ahupuaa of Panaewa in the valleys of Kanahā and Kahoma. The designation is super important for us on the west side. In Kahoma for example, they've been 2 times the developer, West Maui Land shut the water off to Kahoma Stream and dried the entire river. We lost almost 80% of all of the species that we fought long and hard to restore in that stream because they wanted to fill up the reservoir, and that was that was brought before Ayron and I'm pretty sure you dealt with that.

The second was because Kamehameha Schools owns the land, they gave management duties to West Maui Land to handle the intake and after one of those storms, they didn't get back to the intake to clean it out and dried up the river that time also. The designation I believe would help us out in that in that area.

Second, looking at Kanahā, we got the Waipuka and Kanahā wells and the salinity and chloride levels in those wells from way back they discovered chloride levels way beyond the 250 parts per million that was set by Federal Government. It's what led to the complete de-watering of Kanahā Stream to dilute this water they were drawing from the well; so, it was happening way back, and the County knew of this. The problem is we're looking at the County government as the ones to make sure that our public trust is taken care of but they're the ones that turn the blind eye to the to the problem and created another problem by diverting Kanahā Stream.

Recently in the past few years we've been going into these drought situations which I never did remember having when I was growing up. We got to pull back and if we use over a certain amount, we get fined. There is private systems like Launiupoko and Ka'ānapali Resort they don't experience these drought conditions as they continue on watering their golf courses, the swimming pools are continued to be filled, the hotels continue to have their guests take showers and do whatever they want; it's like a free for all, while the community have to go on water restriction and the risk of being penalized for using an excessive amount of water during drought conditions. I don't think that is right. That is a public trust that water belongs to everybody. If because you're a private water company, doesn't mean that you don't fall under these drought condition measures and that's what we experience all the time.

Also, the fictitious lines dividing the Lahaina sector in the different aquifers, we cannot look at those lines as this area has this much amount in sustainable yield and then this sector is on this aquifer, is okay? This is the proverbial straw in the cup that we've been using to exhaustion to describe the situation here. We're just hoping that it's being heard and I'm sure you understand the situation that's why staff is putting in this the designation.

Another thing has to do with the county as I was reading their questions to you folks, and one of it was the county does not support a designation for the entire aquifer sector because some aquifer systems included in this initiative have no basis for designation. We're looking at triggers and what will trigger a designation. In my opinion, we're beyond the triggers. The

gun is already fired. We just trying to find out where the bullet is going to hit? We do not wait and go up to the to the very edge of a cliff to say, stop! - I can see the cliff from far ahead and say I am not getting any closer before I fall off. We cannot do that.

The county and its developers are saying by this designation happening, it's going to completely stop development and people are not going to have a chance to own their homes, which is false and just scare tactics. It's sad to know that the county who's supposed to protect this water resource for us is fighting against us, the public.

There will be a lot more people here to testify because we meet a lot, but they just couldn't make it today; but want to let you know there's a lot of people in this community who support this designation, thank you.

Ms. Blossom Feiteira – Good morning madame Chair and Commissioners. I am a lifelong resident of Maui, Native Hawaiian practitioner born and raised in Lahaina. I want to thank you for the opportunity to submit testimony in support of the designation of the Lahaina sector surface and groundwater management area. We've heard a lot of testimony today about the issues and challenges of our kuleana farmers, native practitioners, insufficient monitoring of the IIFS and West Maui. One of the key things I think that is important for you to know about is that all of the above is very true and it's been ongoing and been a struggle in West Maui for many of the local families and Native Hawaiians on West Maui.

One of the other things I wanted to bring to your attention in the designation of the West Maui as an aquifer sector is also very important in terms of the maintenance and of future restoration of significant historic sites in Lahaina. The Mokuhinia complex is a Nationally Registered Historic site with the Department of Interior, sits right in the middle of Lahaina Town. The diversion of water, since 1890 has significantly impacted this area to the point where in 1905, they buried the pond due to stagnated water. The other impact that happened along the shoreline is that the streams of Kaua'ula and Kahoma that fed into the Mokuhinia Pond, also provided for a muliwai to be established that fed the Poalima of Pakala, Makila, and Polanui, the shoreline across West Maui.

At a time when the muliwai was fully functioning, you had a very diverse and vibrant shoreline ecosystem that had different varieties of limu, varieties of fish species, and it was considered to be by the kupuna of Lahaina, their nursery. The tiger sharks would come in once a year to spawn in that area, and it was the baby sharks that fed through that ecosystem that fronted Moku'ula and Mokuhinia. With the diversion of water, we saw immediately a degradation of the ecosystem, less fish, less limu, warmer waters, and overall degradation of the environment that led the kupuna oftentimes to kapu that place for no fishing and gathering because it just simply wasn't there.

The County of Maui is currently in the process of finalizing their archaeological inventory survey and are preparing an RP for the restoration project known as the Moku'ula project and this designation is so important in bringing back that pond. Without it, it can never happen. Stagnant water is not a good thing. The less water that comes off the streams and the underground aquifer system, clearly would have a major impact on this very significant site. I would ask you all to support the designation in your decision, making today, Mahalo for the opportunity.

Mr. Archie Kalepa – Thank you Madame Chair for this opportunity and for you guys considering protecting the water, the surface water management system in West Maui. I just want to say from a hands-on perspective starting with Kahoma Stream. The stream was dry for over 130 years. A few of us worked hard along with CWRM to open up that stream from mauka to makai and it's been an educational process and I want to tell you why the things that we've seen that's happened in the stream from the 'o'opu coming back, to allowing families to plant kalo in that valley again, it's just been overwhelming. More importantly where does this water go?

We only see water running but I think it's helping our aquifers by streams being open, our aquifers allowed to stay filled; number one. The other thing is it's important for us to maintain instream surface water management and you've heard it from a lot of people today the importance both cultural, environmental, historical, and being faced with what is our future look like?

I think it's very important for us to open up all streams from mauka to makai and the reason is because there's a lot of things that are happening. The limu are dying because there's no fresh water for the limu to spawn, our aquifers are dry, there's not enough water to sustain current communities in West Maui, and so I would encourage you to protect the surface water management system for all of West Maui so that we may have a future. I'm 9-generations plus from Lahaina and I hope my kids can stay home and not have to leave because there's no water for them to use when they become community leaders in this place that we love and call home, West Maui. So please consider protecting the surface management water system in all of West Maui, thank you.

Mr. Hōkūao Pellegrino, Hui o Nā Wai 'Ehā – Good morning, Chair and Commissioners. I want to say mahalo to the Commission's staff. We have seen on the west side of Maui the ability for the staff to go above and beyond and to take care of the interim instream flow standards without a contested case. That's unprecedented in my opinion based on what's happened in Nā Wai 'Ehā. It shows that the Commission is committed to protecting both groundwater and surface water areas, so mahalo to staff for their ability to be proactive in their approach.

Now, many people will say that Nā Wai 'Ehā was the guinea pig to help push this along, but I'd like to also think that we're trailblazers. What you've seen here today and in past commission hearings in regard to this issue, is you have a community that is ready to act, collaborate, and to work with all parties. It's not an easy process as you know with Nā Wai 'Ehā, but they've shown their commitment and that in my opinion deserves the highest and best protection and ensure that the descendants of these individuals, kuleana users and the Native Hawaiian families who have been there for generations, continue to not just live but thrive, cultivate and sustain the community they reside.

Hui o Nā Wai 'Ehā strongly supports the designation for both groundwater and surface water management for West Maui and mahalo to commissioners as well for taking this upon you; I know it's a huge kuleana for all of you and I know that you have an entire community much

bigger than Nā Wai 'Ehā that stands alongside and behind you to help support this implementation process, mahalo.

Ms. Fay McFarlane for 'Aha Moku o Maui – E kala mai. The Commission has a copy of my written testimony and I just wanted to add detail to that which I had written to the Commission about regarding the private wells and DWS wells that are not included in the Water Use Development Plan. Last week we were up in Kaua'ula looking and trying to document all of the kalo damage and the lo'i down to about half of what it was several years ago; and that's due to drought and rot. While there, a contractor that came up who was a consultant that was contracted by the Department of Water Supply to dig a new well and this well hasn't been noticed to CWRM and I don't think they contacted anybody from groundwater about it. It was unclear whether the well is going to connect to the private Launiupoko irrigation service area. They couldn't answer questions what size pump, how it's going to get power, what the alternate sites are, if it's too rocky, can't get through the pōhaku. I wanted to point out in your staff submittal on page 12 talking about some of the LIC wells that are not permitted.

Also, to page 19, there's four other water companies besides DWS and there's no accurate reporting or recording of these wells. Designation is really the only way to go. The Department of Water Supply has painted this as a home rule issue and if it was working, we wouldn't be in the situation that we're in now. There's no hydrology or science to back up the concerns that they've raised until the Department of Water Supply has any better reasons for the commission, they haven't brought anything forward that's convincing or persuasive. Mahalo for your time.

Ms. Clare Apana, Sierra Club Maui – We'd like to support this designation and continue to support it and we especially mahalo Tamara Paltin for taking this to the County Council. We are so impressed by all the testimony that has come forward from this community and the steadfast work that the kuleana have produced in this area is just amazing. We would also like to ask that you be sure to consider and take care of the problem with the wells and how they affect the kuleana water users and as a matter of fact, perhaps they are stakeholders in the aquifer and should be given the right to have prior informed consent for any well. Sierra Club thanks you for your work and supports this designation, Mahalo.

Ms. Joyclynn Costa – I just wanted to testify that I'm in support of this measure, although I hold firmly with the kuleana rights that go back to the Water Commission 174C, that there should be no diminishing or extinguishing of these rights; and I think these people from mauka to makai have suffered both diminishing and extinguishing of these rights for way too many years, thank you.

(end of public testimony)

021522 03:05:52

QUESTIONS/COMMENTS

Commissioner Hannahs – Mahalo the community for their eloquent testimony unanimously in favor of support in passing the recommendation and asked Deputy Manuel from after listening to testimony and hearing of some conflicts with cultural rights in regard to well drillers, landowners, operators, and contractors; can we condition permits for attendance at Ka Huli Ao native rights training? To use education as a preemptive tool to conflict.

Deputy Manuel – I think it's a creative solution to create bridges between water users in understanding how they are a part of this ecosystem but will need to look into that further and if it's something the Commission want to add as a special condition, we could add those as it's within the discretion of the Commission. We're open to it and can bring language to the Commission to consider.

Commissioner Hannahs – the point arises from this discussion and not directly germane and don't want to compromise on our ability to act on this motion before us; but something to think about.

Deputy Manuel – will work with staff and think through it on a more system wide basis but it's a great recommendation to mediate potential conflict before it occurs.

Chair Case – noted there are a few written testimonies that raises questions and or objections, but this stage still needs to go through public hearing and still time for input from the public.

Commissioner Katayama – (to Chair) for the recommendation be more generic in the sense that we will authorize you to start the process to designate the Lahaina Aquifer sector Maui as a surface and groundwater management area under HRS 174C-41, and can delete Item 2, and give you the authority to start and complete the process, to whatever conclusion is drawn and to broaden your authority rather than take incremental steps towards designation.

Deputy Manuel – I appreciate the intent to broaden the scope and in working with our AG's, these are the recommended actions the Commission must make and take explicitly to provide that due process as enumerated in The Code. This language is specific to the Code implementation and after holding the public hearing, we'll comeback with the recommendation for approval by the Commission.

Commissioner Katayama – what is the purpose of item 2?

Deputy Manuel – per the Code, we're required to notice and hold a public hearing on the matter. Similar to other provisions, as example, updates or amendments to the Water Plans and could delegate that in future actions that we don't have to do this, but right now it is explicit.

Commissioner Katayama – it's not explicit in 174-C?

Deputy Manuel – no. *(read the step in the submittal referring to the process and reiterated it was discussed with AG's and asked Deputy AG Colin Lau for comment)*

Mr. Colin Lau, Deputy AG – replied under 174-46, the Commission has to render a decision that's upon the recommendation from the Chair, and then what happens, then the Commission

decides whether to designate or not and gives public notice. It's all part of due process so if anybody wants to appeal the decision, then it would happen at that that point. It's better to just compartmentalize each particular step at this point rather than just giving delegation of authority to the Chair because it does need to come back to the Commission.

Commissioner Katayama – I understand in the process 46 says that; but if you look at 42 it covers item-2.

Deputy Manuel – Mahalo for the question, I appreciate it.

Commissioner Kagawa-Viviani – in the designation process, are there other actions that may be part of this process that precede step 5?

Deputy Manuel – not in the current statue; we would hold a public hearing based on that and it requires us to develop findings of fact then we would bring back to the Commission to make its final decision. The decision after this would be a formal decision by the Commission to either accept, deny, or defer the recommendation of the Chair to designate.

Commissioner Kagawa-Viviani – in the findings of fact, you could incorporate and address some of the questions that were raised.

Deputy Manuel – yes, it's all part of the process and to build that record; so testimony received today would also be incorporated as well as the public hearing.

Commissioner Kagawa-Viviani – commented on the scientific aspect such as the West Maui hydrology and land management and asked for that to be incorporated for Commissioners understanding of the designation if it's not already included.

021522 03:15:42

**MOTION: (KATAYAMA/HANNAHS)
To approve B-4 as submitted.
UNANIMOUSLY APPROVED
CASE/BUCK/HANNAHS/KAGAWA-VIVIANI/KATAYAMA/MEYER
Commissioner Seto was absent during the vote**

Chairperson Case thanked everyone including staff, for all their hard work on this in a very thoughtful and inclusive manner; also thanked all testifiers.

RECESS: 12:20 PM

RECONVENE 12:49 PM

021522 03:20:45

C. NON-ACTION ITEM / INFORMATIONAL BRIEFING

- 1. Status of Combined Petition to Amend the Interim Instream Flow Standards and Allegation of Waste By Moloka'i No Ka Heke for Streams in the Surface Water Hydrologic Units of Waikolu (4003), Kawela (4037), Kaunakakai (4039), and Manawainui (4041), and Reservation of non-potable water for the Department of Hawaiian Home Lands, Moloka'i**

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

Dr. Strauch gave a PowerPoint presentation on the item noting its summary with recommendations to include a combination of in-stream flow standards, abandonment of unused diversions and DHHL reservations which will protect instream values and provide better balance for instream and non-stream public trust uses while maintaining existing, non-public trust uses. In Moloka'i, the primary focus is on Central Molokai, with streams in the Waikolu, Kawela, Kaunakakai, and the Manawainui surface water hydrologic units diverted to support agriculture, landscape irrigation, and industrial uses.

A topographic map was shown and briefly explained of the Mountain water system and Moloka'i irrigation systems. The Mountain water system managed by Moloka'i Ranch has (7) stream intakes. Mountain water system has two pipelines that are interconnected. Dr. Strauch explained and showed photos of each intake on the Mountain water system line noting the largest source of water being the East Kawela intake (diversion 867) which has a continuous streamflow record maintained by USGS. Median streamflow on East Kawela is about 340,000 gpd. The stream is largely dependent on rainfall driven by runoff without much groundwater resulting in very low flow conditions when there is no rainfall. When the intake is operating about 58% of the days have "0" flow remaining in the stream.

The East Kawela Tributary (diversion 866), West Kawela (diversion 862), and Kamoku intake (diversion 862) have been inactive since at least 2005. The Hanalilolilo intake (diversion 864) is the second largest source of water with a median streamflow available is roughly between 180,000 gpd and is the second largest source of water. The Kalihi (diversion 868) and Lualohe (diversion 867) intakes has remained inactive over six years.

The Kawela Seepage run map was shown and briefed on. The Kawela instream flow value table were shown noting a high density of archaeological sites with an outstanding ranking for recreational resources. There is a critical habitat for threatened or endangered species as well as a freshwater habitat for stream life and damselflies noting an inland fishpond which is now a wildlife refuge. Restoration of spring flow via increased recharge on the mauka portions will improve nearshore environments including the growth of limu that is collected by the community as well as nearshore ecosystem productivity.

The Mountain Water System has (7) reservoirs that serve as a source of storage to supplement the lack of surface flows when it doesn't rain. Estimated maximum annual evaporative loss from the reservoirs is approximately 33,000 gpd. The end uses of both non-potable and potable water uses were touched on noting various utilities and end users also

noting the current average volume for uses non-potable water for livestock was also discussed. The overlap is that the Hanaliolio intake draws water from Waikolu Valley which affects the availability of water for the MIS and DHHL.

The Moloka'i Irrigation System (MIS) has (4) stream diversions, (6) wells and the Kualapu'u Reservoir. Dr. Strauch briefed and showed photos of the dams (intakes) and wells also showing the Napuleloa Spring located at well #6. There's a lot of USGS stream gaging activity on Waikolu Stream over the years which continue to provide valuable information. Waikolu Stream is one of the highest ranking biological resources in the State with all (5) 'o'opu species found as well as a large population of hihiwai and 'ōpae. Waikolu Instream values also ranks high with outstanding recreational and riparian resources. The MIS system was built for the Department of Hawaiian Home Lands (DHHL) to provide non-potable water for homesteading and agricultural needs. Noting the operation of the Hanaliolilo intake directly effects water available for DHHL.

The recommendations and its consequences were noted and explained as well as the proposed actions and next steps to consider for the water systems.

021522 04:05:48

PUBLIC TESTIMONY

Dr. Jonathan Scheuer, behalf of Dept. of Hawaiian Home Lands – Aloha kākou Commissioners and Chair Case. We're very grateful to your staff and Dr. Strauch for the submittal today. We're also particularly grateful to the members of Moloka'i No Ka Heke who brought the issue of the management of the Moloka'i water system to the Commission's attention. And are also very much grateful to the members of the Moloka'i community who've supported in testimony today the reservation proposed for the Department of Hawaiian Homelands.

I just want to confirm for you that despite the recent and approval of our water use permit for groundwater for some of our needs in Central Moloka'i, the Department still has significant unmet needs for non-potable water uses especially in the Kalama'ula section. This proposed reservation would be very significant for the department. You may or may not know that among the primary purposes of the Hawaiian Homes Commission Act, is that it should be implemented in order to provide adequate amounts of water and supporting infrastructure so that all the set aside homelands can always be usable and accessible.

This of course is a significant challenge given the nature of most of the lands that Congress set aside for our homesteading, but this is a meaningful step forward if you take it. Last thing that I would note is that for a number of years the Department has supported seeking reservations of groundwater or surface water for DHHL in conjunction with the setting of interim instream flow standards so we're very grateful that the commission took an affirmative step to do these two things at the same time. We recognize that while we're a public trust use of water, we're an off-stream public trust use of water and so we recognize that we have a particular role to play in the consumption and use of water in Hawaii, and we feel that the staff submittal does a good job at addressing that particular role in the context and the need to restore streams and protect other public trust uses. I'm very happy to answer

any questions, Mahalo nui.

Chairperson Case called upon Mr. Mahesh Cleveland who then deferred to the Moloka'i community for oral testimony and asked if there's still time afterwards, he will then provide testimony and noted Earthjustice also provided written testimony.

Mr. Walter Ritte, Moloka'i Homesteader – Aloha members. First, I'd like to congratulate the people on Maui for what they're trying to do with their mountain. We tried to do that 30 years ago and we were successful in designating our mountains, and now it's taking us all of this time from 30 years to try and figure out how we're really going to protect our rivers, so I'd like to thank Sarah Sights for designating our island 30 years ago.

Our submittal really is trying to protect our stream and its life, wanting to make sure that everybody understands where we're coming from. We also want to protect our aquifer that are getting saltier and we are positive that this committee supports us and is going to allow Moloka'i Ranch to keep operations going according to their 62,000 gallons a day that they listed as being their needs.

We're not going to be harming anybody; our proposal is to protect what we tried to protect some 30 years ago. The problem is we got 7 diversions up in the mountains and Moloka'i is 37 miles long and the diversions of the pipes are 20 miles. The diversions are taking water 20 miles all the way to West Moloka'i that has created huge problems in our mountains. The history of the problems is not new. Bernice Pauahi Bishop once owned 1/3 of our island; her lands got sold out to Moloka'i Ranch and they tried to raise sugarcane, put their wells along the shorelines. All their wells went salty, then they went mauka.

It's been a 100 years now from them going mauka and taking the water to their ahupua'a of Kawela. Right now, we're supporting a lot of the work that your staff did. We want to congratulate him for spending so much time on Moloka'i and also bringing us up to speed about what he's trying to accomplish. We support a lot of the things that he's talked about. The one thing that we do not support is the amount of water that he wants to keep in that stream.

I think we can keep a lot more water in that stream because the problems of getting Ag water to Moloka'i Ranch has been solved since 100 year solution. That solution he was talking about is the MIS. We got 1,000,000,000 gallons of water that can help farmers on Moloka'i. We don't need to be taking water of our streams that they did 100 years ago when we have water coming out of Waikolu, and I wanted to make that really clear and allows us to say we don't support Q80; we really support Q40. That's going to be important for us as it will bring life back into our rivers and allow water for Moloka'i Ranch to have 62,000 gallons a day. We're not going to run them dry but we're going to increase the life protection of our streams at Waikolu.

I just wanted to let you guys know that this is important for us. It's been 100 years of misuse of these rivers, there's 7 diversions and we want those diversions to be taken care of in our mountains to come back to life, because we all know that climate change is not being helpful in putting water into our rivers right now. Every single island has the same kinds of problems. Aloha and thank you very much for allowing us to testify.

Ms. Lana Corpuz Moloka'i Homesteader – Aloha Water Commission. Mahalo for your time. I'm from Kaunakakai and I'm here to talk about agenda item C-1, with regards in putting an IIFS into Kawela Stream. Just a little comparison for perspective I'm going to assume you watched Moana the Disney movie.

In the movie, Maui takes Tafiiti's heart and she's a creator of all life. As soon as he takes her heart, there's this plague of death that moves throughout and that's what the ranch is doing by taking water out of Kawela Stream. We've seen our island pretty much die; we can visually see it's turning brown.

So, we're hoping that by putting this infrastructure in that we can get Kawela River and the rest of our island back to healthy; and that it be the life giver that it once was, Mahalo.

Ms. Teave Heen Moloka'i Homesteader – Aloha and Mahalo Commissioners for your time to testify and your support and complete understanding of the critical needs of our 'āina at this time. I was born and raised in Moloka'i in the ahupua'a of Kawela and I'm testifying on behalf of my 'ohana and Moloka'i No Ka Heke on item C-1 in full support of the investigation into Moloka'i Property Ltd., water misuse, the environmental damages and the water right violations.

I stress the importance of the formal guidelines to be upheld in its entirety until properly rectified. I also support the setting of interim instream flow standards for Kawela, Waikolu, Kaunakakai and Manawainui. This oral testimony is detailed just to Kawela because it's more personal to me. I ask that as you determine the interim instream flow standards for Kawela, to please be mindful of the devastating historical impact that decades of water deprivation have done to the stream in the surrounding habitat.

Our kupuna described Kawela as a beautiful spot with lush green gardens and fruitful farms. So we know that it was once a thriving ahupua'a with salt beds, rich nearshore reefs, abundant springs, and thriving fishponds. Now, it's a giant desolate and for no other reason other than the extensive damages caused by an absence of water. The Kawela Stream, the river is what we call it, is right behind our home. As children, we'd spend endless afternoons at this river swimming and exploring. The boys would be hunting, and we'll find petroglyphs and just exploring our backyard, cultivating strong connections to 'āina and solidifying place and purpose.

Now these people need connection not only to each other, but to place; and water was that connection and without it there is no life. I remember the stream provided life for species like the 'ōpae and the 'o'opu. It would swim at us in the ponds that we built and near the muliwai we would build rafts and practice throwing net on baby 'oama and mullet. Near Kakaha'ia we would gather 'a'ama-black crab, it was in the kiawe trees and when we shake the tree the crab would come raining down. We'd pick mangoes in the patch down below Kawela plantation. Like most families, we relied heavily on our island for sustenance. Now, sustenance are all things that provide nourishment, the necessities of life. When my father was out catching fish and food types of sustenance, the river and her surroundings were

providing us children with a different type of play, a type that is hardly found now.

The stream provided us a refreshing place to wash away our troubles, and her different habitats taught us about the many cycles of life. As we got older, we witnessed the stream drying up. It got hotter, drier and the river only ran on the heavy rains. The muliwai got backed up and now there is no connection. The surface water doesn't flow from mauka to makai. Once a perineal stream, now hardly makes its way to the ocean. All this can be reversed only if sufficient amounts of water are set free.

The streams got to flow, our 'āina cannot be put second to development to increase economic demands and neglect, or in this case, just straight water theft. The 'āina needs us to put it first. I feel by holding Moloka'i Property, Ltd., accountable to historical damages, that would help. And if all possible, I would ask that you please set IIFS that will satisfy the environmental needs and revitalize Moloka'i future, Mahalo nui for your time.

Ms. Momi Afelin, Moloka'i Homestead Resident – Aloha kākou. I'm from Kahananui and a member of Moloka'i No Ka Heke. In my work, I coordinate community engagement and research at our loko i'a here and for our limu hui. As Teave mentioned, the mixing of freshwater with saltwater along our shorelines is essential for the limu to grow. The limu that feeds the pua-the baby fish that come into the shore that eventually become the fish that our community relies on to eat. Not only are these activities vital to the nearshore marine, and ecosystem, but they're also important for our community to maintain the sustenance lifestyle.

According to the Governor's Moloka'i Sustenance Task Force study of 1994, 28% of Moloka'i families acquire their food through sustenance activities. That number jumps up to 38% for native Hawaiian families. In a recent 2018 survey by Sustainable Moloka'i, up to 64% of our community practices some type of sustenance traditions. Diverting streamflow in Kawela means the best freshwater to support the limu and i'a of the stream and wai for the nearshore environment, while the environmental impacts of these diversion shouldn't be understated, I also urge you to consider the impacts that this has on our community. By disrupting the nearshore ecosystem, we lose the ability to practice these traditions and prevent the intergenerational knowledge transfer from Kupuna to keiki.

How can kupuna teach their keiki how to gather and how to clean 'ele'ele if it doesn't grow anymore because you don't have enough fresh water at our shores? With that said, I'm asking that you strengthen the IIFS to ensure that a greater amount of water is kept in the streams at all times before any diversions can be made to protect our lifestyle and our food security. I ask that the IIFS be set at Q65 and that you implement measures to ensure these IIFS will be monitored and be enforced. In addition, I ask you to ensure Moloka'i Ranch clean up their 'ōpala in the mountains when they abandoned their diversions as we saw in Ayrton's pictures, there are pipes upon pipes there in the mountains.

Lastly, I ask that you address the waste complaints noted in the petition expeditiously. If Moloka'i Ranch is taking 370,000 gallons per day of water and only reporting 62,000 gallons of use, where is the rest of the water going? I ask that this be addressed and that we ensure the wai of Moloka'i is being used responsively, Mahalo.

Ms. Mahina Poepoe, Moloka'i Homestead Resident – Good afternoon, everybody. I am from Moloka'i. I wanted to hop on and support getting this moving along, establishing these IIFSs as listed in the agenda and require the decommissioning of the derelict dams and cleanup of the littered materials and the DHHL reservations.

I wanted to thank staff for taking action for investigating and for Ayrton for putting together such a very thorough report. I know that this is information only today so I won't go into detail because I'm assuming this will be scheduled again soon, and I do humbly request that you prioritize agendaizing this for decision making as soon as possible. At that time, I will come back with more substantial testimony. I do want to say that I think there's more room and emphasis that should be given to the public trust purpose of water in its natural cycle. Mauka to Makai connectivity is needed; so, I'd like to understand better whether the recommended IIFS will achieve that consistent connection and to what extent it's expected.

I support the scenario that puts maximum water back into its natural cycle. I support putting all the water back, but I know that's not going to happen. I can conclude, ask you to again prioritize this for decision making, scheduling and begin the process of reviving our deprived water courses, ecosystems, riparian nearshore areas as this are a century's worth of damage, destruction, and death that will take decades to heal; it'll take more than my lifetime to heal, so the sooner we get that started the better, Mahalo.

Mr. Kahekili Pa-Kala, Moloka'i Homestead Resident – Aloha everybody. Thanks for having me. I am a lifetime Moloka'i resident. My background is fishpond and 'hupua'a restoration. I just like to say I support Moloka'i No Ka Heke and the staff's recommendation to enforce the IIFS, but I would request that it would be a little bit more. Like Mahina said, all would be nice. I know a lot of people got more things to say as there's not too much time so, I'll just leave it at that. Thank you for your time, Aloha.

Mr. Lohiao Paoa, Moloka'i Homestead Resident – Aloha Commissioners. I want to say Mahalo, to Kaleo and Ayrton as well as the Commission for allowing me to testify. I'm testifying on behalf of my family as well Moloka'i No Ka Heke. I'm the son of Donna and Mel Paoa. I'm a lineal descendant of Kawela, ahupua'a. My kupuna is buried in Kawela and my kids are raised in Kawela.

I've already submitted written testimony, so I'll just say a few things. I'm in support of the staff's efforts to set interim instream flow standards for Kawela, Manawainui, Kaunakakai, and Waikolu. Although I appreciate the staff's recommendations, I believe Kawela needs more water. I asked the Commission to please take a deeper look at the amount of water being diverted versus the amount of water actually being used by the diverter.

Q80 flow is not nearly enough water relative to the importance that the Kawela Stream has on the 'āina and its people. Obviously just from hearing earlier testimonies with West Maui, setting interim instream flow standards is just a start. I want to stress the importance of regulation and monitoring after the IIFS are set. I am in support of the order to formally abandon 3 of the 5 inactive diversions, those being East Kawela tributary, West Kawela and Kalihi. Please make the diverters clean up their mess, simple.

Finally, I want to encourage the Commission to take this Moloka'i water issue seriously, because your decision truly affects every single person on this island. There's so much history and potential in this ahupua'a. Mahalo again, I appreciate the Commission's hard work over the years and look forward to helping you guys make the right decision, Aloha.

Mr. Richard Westlund, Moloka'i Resident – I live in on the West end and I'm also the President of the West Moloka'i Association, which is the homeowners association of about 600 families on the West end. The reason I really wanted to be here is that there were some confusions that the diversion of Kawela Stream was being utilized as Ag water for Kaluakoi, which is totally inaccurate. There has never been any Ag water delivered to the West End.

In the sense of conception, it was developed with Ag water with promised Ag water, but we have never seen that water. In the earlier slides it did show that there is potable water being used for a corporal purpose on the West End, yet we have probably one of the highest water rates in the nation, and we try and restrict people's uses by rules and regulations but it's all potable water.

The point I'm trying to make is that we can probably do something without diverting streams to supply. The west end is changing; it used to be a pro-development area and people were golfers, and that's changed. The people that are here now have settled in, the golf course have been closed for 15 years almost and the people here like the island. The makeup of the West End is changing, you're seeing people buying and there are local Hawaiians. They're not just mainlanders coming over; its people looking and when they're purchasing, they don't have Ag water. They want to plant and do something.

One thing that I would like to introduce is, in this presentation they were talking about that the West End has no Ag water. It's using some potable water for agricultural purpose, and it would serve the West End without going into diverting streams, etc. and we understand that water is a valuable resource; but the West End could flourish, and we could grow products and we could flourish again if there was Ag water flowing through here. The current water situation is everything that is delivered to the West End is all under one tariff, which is potable water tariff, and so just wanted to make a point that the west end is changing, and the local people here want to grow stuff. The prices are so high here they can't which is intentional to protect the water source on the island.

That was the reason that we did this. There are now changes going on in the West End and are people here who would love to participate in the community to be able to grow products and resources and bring that to the island. Thank you very much for this opportunity.

Mr. Mahesh Cleveland, Earthjustice – Thank you, Chair. Aloha Commissioners. I'm an attorney with Earthjustice. We represent Moloka'i No Ka Heke in this matter, many of whom you've heard from today. You have our written testimony and it's detailed but based on information presented in the staff submittal, it would be both practicable and manageable to set much higher IIFS for the Moloka'i mountain streams.

Given that context, this commission should not shy away from protecting any streams to the

maximum extent practicable. The encouraging and even exciting thing about this scenario is that you could do it. You could restore 240,000 gallons a day to Kawela Stream tomorrow, as we have requested, or even more, and the end users will not miss a drop. Setting a Q50 median flow would not curtail any current off stream uses or those plans for the future. The solution here is not to take more water, it is to more effectively use the water that is taken.

With nearly 50 million gallons of available storage capacity in the Mountain Water System network of reservoirs and tanks, there is ample room to meet and grow beyond the 62,000 gallons used daily and we don't need to see Kawela stream drain dry.

All of those off stream needs can be readily met while maintaining abundant stream flows to provide for Kawela's needs. The whole time this system has been operating the diverters had their finger on a scale. Based on available information, the mountain water system would drain every drop out of Kawela stream for months' worth of time out of every year, and the combined effect of this practice dates to around 1900, has been to deprive Kawela watershed community of uncounted billions of gallons of water that should have flowed down that mountain through the aquifer and into the ocean as nature intended.

We can and need to reverse this. We can meet all needs while ensuring that no water is taken from Kawela for several months of the year, instead of taking every drop. It's going to allow the rebuilding of Kawela instream and near shore resources as you've heard folks talk about. There's an opportunity for this commission to act strongly in favor of protecting the resource without worrying about negatively impacting the availability of water for off stream users. As the staff submittal discusses, the mean diverted flow in 2019 to 2021 was 370,000 gallons a day while reported uses in 2021 were 62,000 gallons a day.

Any of us, if we saw a child piling food on a plate and throwing away 83% of it would probably have something to say; this same principle applies here. They simply don't need to divert anywhere near the amount of water they habitually taken, so that water should remain in its natural course. If needs grow, they could be met not by diverting more water again, but efficiently maximizing the storage capacity that already exists. The reservoirs are on the mountains. Some of them are in serious disrepair but it's not like they would need to dig and build new reservoirs when all they got to do is use what they have to 80% capacity or higher.

Kawela and her community have been carrying the burden of this mismanagement for all these years. It's time to fix that. Please remember at this high level of flow, restoration can be accomplished without having to compromise off stream uses, and that's to Kawela. We also asked that actual median flow Q50 IIFS be set for the unused diversion works at Kamoku and Lualohe, which staff intend recommended to be left in place, and that if any future owner of those diversions wishes to seek to reactivate those two diversions, they should be required to obtain a new Stream Diversion Works Permit, some of them over a 100-years old and been sitting defunct for decades.

If someone wants to use them, they can petition to re-amend the IIFS to allow for that and jump through the hoops of getting the diversion structures fixed and operational. There's no need to let them sit as they are. I think one Kamoku structure being kept is halfway leaning over and so these things would have to be evaluated to be reactivated. If the Commission will not set a numerical IIFS for Waikolu Stream at the Hanalilolilo intake as we've asked, we ask for your commitment to do so before implementing DHHL's 150,000 gallon

reservation which Moloka'i No Ka Heke supports. For the other three unused diversion structures, we ask that you also require the diverters to submit a cleanup plan in addition to the formal abandonment permit request as the health of those streams is of primary importance. In your commitment, that our formal complaint against waste, will be formally addressed and resolved by the end of this calendar year because as we've noted, the action that staff proposes you take now isn't going to address that at all and we want to keep this moving. We look forward to the establishment of the IIFS and continue to engage with this Commission and its process as you move toward a resolution of these and the other longstanding water resource issues on Moloka'i. Mahalo for your time.

(end of public testimony)

021522 04:37:46

QUESTIONS/COMMENTS

Commissioner Hannahs – (to Ayron) reference on page 6 relating to the phrase “in mythology” and advised caution in use of that phrase as the literal meaning is a fictional story and the more we come to understand our own language and history, we recognize this was data captured that these stories represent data capture of real life events and real natural phenomenon; in many cases we haven't figured how to decode it; but in an oral society it was important to capture it and be able to pass it on from generation to generation with such astute insights about what was going on in a place that allowed us to survive for generations and millennials.

Dr. Strauch – noted he was paraphrasing a written text as it was not in his own words but understands Commissioner Hannahs' statement.

Commissioner Hannahs – I thought it was important to put that on the record, because I think people have a misunderstanding of the deeper meaning of these stories and the extent, we share them. Asked in regard to the system losses as it seems like a high percentage of loss compared to modern industry standard and can we be more explicit in addressing that?

Dr. Strauch – answered to make more clear recommendations regarding; I've identified the annual evaporative loss from each reservoir and combined is what we have for an annual evaporative loss from the system. The benefit of having a reservoir is getting you through the dry period when we're keeping all the water in the stream, though I don't necessarily want to recommend decommissioning entire reservoirs but there may be opportunities to reduce evaporative loss by putting a cover on a reservoir or by identifying which reservoirs have the highest evaporative loss and focus on upgrading the infrastructure.

Commissioner Hannahs – we've been trying to use policy and setting our decisions and orders to drive investment to modernize infrastructure that is very inefficient. We should be consistent and assertive. In the Kukui decision and the order of the Supreme Court for alternative use analysis that has not been done. What are the consequences on permits when somebody disregards an order of the court?

Dr. Strauch – it was related to a groundwater permit application but to the extent that alternatives to groundwater could be available as an alternative to surface water and deferred

to further comment to Deputy Manuel.

Deputy Manuel – the point of the order is that alternative analysis is required before the Commission makes a decision. There was a water use permit for Well 17 that was considered as part of that case. Anybody that comes in for a water use permit, we have an obligation to evaluate whether or not they're reasonable and practicable alternatives to that water use. We have an obligation to also hold users accountable in their responses even if they aren't presenting alternatives, we need to do our own research and analyze whether that's practicable.

Chairperson Case noted this is still in process and appreciated the very thorough work (Ayron) provided and thanked all that were present to testify on the subject and look forward to the next steps of the process.

RECESS: 2:14 PM

RECONVENE: 2:21 PM

021522 04:50:42

D. RED HILL ITEMS

1. Non-Action Item - Status Update from Red Hill Permitted Interaction Group (The Group) on Scope of Investigation Approved on January 7, 2022, Meeting.

Deputy Manuel introduced the submittal item and noted that Chair Case appointed Commissioners Kagawa-Viviani, Buck and Meyer to serve as members of The Permitted Interaction Group (The Group).

PRESENTATION GIVEN BY: Commissioner Paul Meyer
Commissioner Aurora Kagawa-Viviani
Commissioner Mike Buck

Commissioner Meyer noted that in regarding Red Hill, the AG who's the legal advisor stressed on the follow-up of water use permit modifications for the Navy's three well permits, to address the issues of the Commission concerns. The concern and goals are to reiterate what the Commission decided at its last meeting in regard to the permanent defueling and decommission of the tanks and fueling facility similar to what the Navy accomplished in California and Seattle.

Secondly, to achieve aquifer and soil remediations as these are longer-term issues. Thirdly, it's likely we're going to have a longer-term emergency water shortage due to the contamination of the Pearl Harbor (PH) aquifer water source and at its January meeting, the commission adopted a position that would use the full range of its authority and capacity to work with all stakeholders to monitor, evaluate, and enforce both short and long-term efforts and actions to eliminate the threat of the current Red Hill Bulk Storage Facility to O'ahu's water resource.

Commissioner Meyer noted the Commission's legal authority and also the Findings of Fact and the precautionary principle of what is known. Also touched on The Group's initial scope of work such as water shortage issues, expansion of monitoring networks, wells that monitor and test wells that need to go into place to accurately measure the contamination and its dissemination through the aquifer, and to also address funding sources in how it gets paid for. Also noting that the group and Commission is still reviewing its practical legal options that the Commission can pursue.

The NAVFAC Water Use Permits were noted which CWRM has legal authority to modify.

The Group has identified several priorities including update permit modifications and special conditions to the NAVFAC permitted wells, recommend permanent decommissioning of the RH underground fuel tanks, and prepare for a water shortage or water emergency.

(Commissioner Kagawa-Viviani continued on the following portion of the presentation)

Commissioner Kagawa-Viviani noted the importance of understanding the situation around Red Hill and the fuel release and how it connects to the Commissions' responsibility. It's important to understand that the geology of this region is highly complex as well as the contaminant being a very complex material. The Commission should actively support timely, rigorous and transparent modeling, sampling and monitoring, and remediation. The advisory group recommends a precautionary principle where data are sparse as gaining a strong understanding of what's happening.

The Group (and Commission) take official notice of key DOH issued documents that were approved or signed off on in early January, such as • DoH Hearing Officer's D&O, FoF, CoL; • IDWST Drinking Water Sampling Plan; • Red Hill Shaft Recovery and Mitigation Plan (RHSRMP).

From scoping, it was suggested to rely on the Navy's version of the groundwater model, but one that reflects comments submitted by Department of Health EPA, Board of Water Supply USGS, and other experts because of the strong existing disagreement of the groundwater models. The water shortage assignments were briefed on noting to investigate whether a water shortage exists in the Pearl Harbor and Honolulu aquifer sector area pursuant to HRS §174C-62, and whether the Pearl Harbor Water Shortage Plan (PHWSP) is activated and should be followed. The key question is how long will it take to remediate and recover all the waters affected by the Red Hill contamination? - assuming no further releases as it will affect when decisions are made to utilize those wells again as the Commission's role is to look at things in the bigger picture.

The Pearl Harbor aquifer is crucial for meeting municipal water demands of O'ahu and supporting numerous but poorly assessed public trust purposes. The effective areas roughly 90% of the pumping for Honolulu is Honolulu BWS. With a high demand in the primary Urban's Center and more resources in Central O'ahu - 'Ewa and Wai'anae also draw from that area. There's going to be need for dialogue and coordination with Board of Water Supply in what role the Commission has in imposing or supporting restrictions and recommend a holistic approach taken to the water shortage assessment. We're responsible as municipal and permitted uses are part of our responsibilities in accordance with our public trust mandate. We need to consider not just the direct effects of this event but also the

indirect and how pumping patterns will impact non-municipal water uses and other stakeholders.

(Commissioner Buck continued on the following portion of the presentation)

Noting the many Zoom meetings with the Navy with over 60+ people over 5-8 different agencies. There's over 200,000 gallons leaked that have been reported. Questions to the BWS were posed noting it could take years before the Halawa Shaft is reopened. This is when the precautionary principle will apply.

The DOH'S hearing officer's D&O, Finding of Fact #71 were highlighted. The legal authorities were stated noting much collaboration between agencies is still needed in regard to decommissioning of the tanks. The next steps will also include permit modifications of the Navy's permitted wells.

021522 05:23:42

QUESTIONS/COMMENTS

Commissioner Hannahs – appreciated “the Group” for their call of duty and efforts on behalf of the Water Commission.

021522 05:24:10

D. RED HILL ITEMS

2. Non-Action Item - Presentations and Updates Related to Red Hill from the Following:

a. State Department of Health – Update on Drinking Water System Flushing and Water Quality Data Collection

Chairperson Case notified that Commissioner Seto is an ex-officio representative from the State Department of Health who sits on the Commission

PRESENTATION GIVEN BY: Commissioner Joanna Seto on behalf of Department of Health for DLNR-Commission on Water Resource Management (CWRM)

Commissioner Seto provided a slide presentation and noted the agenda. The Navy water system uses under advisory should avoid using the water for drinking, cooking, or oral hygiene; also, to avoid using the water for other domestic needs as bathing, dishwashing, and laundry. Pets are also under the advisory as well. The Navy and Army have also set up Water Rapid Response teams to assist their customers. The symptoms from exposure were noted.

The flushing status were highlighted with the map shown and explained. The Stage-4 sampling results report (flushing zone I-1) were noted which can be found upon the JBPHH-safewaters.org webpage.

The initial sampling of the zone I-1 effort included 10% of homes and non-residential buildings which includes 135 homes; 6 non-residences; and 1 school. The long-term monitoring will include additional sampling of 5% of homes per month, per zone (months 1-3 after the first sampling); and 10% of homes per zone over each 6-month and remaining 3-month period (months 4-24 after initial sampling).

The DOH guidance to amend the public health advisory were explained and the contact numbers of the DOH-Safe Drinking Water Branch, US Navy and US Army were provided, to state any general public concerns. The DOH's mission statement were also given.

021522 05:34:30

D. RED HILL ITEMS

2. Non-Action Item - Presentations and Updates Related to Red Hill from the Following:

b. Naval Facilities Engineering Systems Command Hawai'i (NAVFAC Hawai'i) – Update on Drinking Water Systems Recovery and Red Hill Shaft Recovery and Monitoring Plan

Captain Gordy Meyer, Commanding Officer & Region Engineer (NAVFAC Hawaii) introduced the NAVFAC Hawaii team: Mr. Jeremy Mitchell, Deputy Public Works Officer Jt. Base Pearl Harbor-Hickam; Capt. Randall Harmeyer, Public Works Officer (JBPHH); Mr. Travis Hylton, Environmental Business, NAVFAC Pacific.

Cpt. Meyer thanked the Commission and stated the agenda of the presentation.

PRESENTATION GIVEN BY: Mr. Jeremy Mitchell, JBPHH

Mr. Mitchell summarized the JBPHH water system reporting with average monthly use of 20.333 mgd and noting the monthly reporting being up to date as of January 2022, with weekly submissions to CWRM since December 22, 2021.

PRESENTATION GIVEN BY: Capt. Randall Harmeyer, JBPHH

Cpt. Harmeyer presented on the Water System Recovery and Flushing Plan (WSRFP) which is now in the stage-4, portion of the plan with the discharge of water through the GAC systems noting the applicable permits obtained.

The distribution system updates, sampling and testing, and long-term sampling were highlighted noting the various stages in also, the reviewing reduced irrigation plans for common areas, housing and environmentally sensitive areas to maintain the health of our grounds, trees, and the well-being of residents but also carefully begin reduced irrigation; in some places by as much as 60% from what was previously before November.

(Cpt. Meyer added) that as we reduce irrigation, we'll look closely to how that impacts our pumping rates at our wells to ensure that we do not overcharge our wells and the permits we

have.

PRESENTATION GIVEN BY: Mr. Travis Hylton, NAVFAC Pacific

Mr. Hylton presented on the Red Hill Shaft Recovery and Monitoring Plan (RHSRMP). The plan was signed on the January 26, 2022, jointly developed by the Interagency Drinking Water Systems team which consists of the Department of Health, U.S EPA and Navy with extensive contributions by Dept. of Land & Natural Resources (DLNR) Water Commission (CWRM), Div. of Aquatics, and Div. of Forestry/Wildlife, that provided ecological input and water resource impact offset.

Overall, the plan is a general roadmap for the recovery of the Red Hill Shaft with focus on an intermediate goal of creating a groundwater capture zone to counter the potential for contaminant migration offsite with defining the levels of monitoring involved. The 5 mgd GAC operations were explained with continuous water-level and stream monitoring as well as effluent beneficial use study underway.

One of the most important parts of the RHSRMP is the groundwater monitoring both at level and in water quality. To accomplish this, we currently have permit applications with the Commission for 10 monitoring wells surrounding the Red Hill shaft at 8 locations to get a better site picture of what the extent of the contamination may be around the release site within the Red Hill tunnel in the vicinity of the Red Hill Shaft; with collaboration from other agencies to assess what is the best point to do groundwater monitoring and in what priority.

Fuel recovery is being done primarily within the water development tunnel using skimmers and absorbance. The remediation activities were stated noting that geophysics ground penetrating radar electro resistivity studies taken to give a better look deeper under the tunnel, to be able to target where to extend vapor monitor probes deeper to track down the fuel that may be in the unsaturated zone. All of these are rolling up into development of longer, broader remediation strategies for the site for the soil, unsaturated rock, media zones, and the groundwater itself with the continuing of the process in cooperation with the Department Health.

The RHSMP does identify there have been impacts to water resources from this incident and are working towards addressing to make things better also through the Pearl Harbor Water Resources Master Plan addresses the area of conservation, water reuse, enhanced recharge, source protection, production capacity expansion which have been started on which will be conducted in a stakeholder driven environment; with the ultimate goal of lessening the Navy's water footprint and increasing water security across the island. Also, to pursue watershed protection efforts through the DoD Readiness and Environmental Protection Integration (REPI) Program is another effort showing promise with effort also from the DLNR.

The beneficial reuse of the affluent and the PHWRMP will also pursue things identified in the Red Hill Shaft Recovery and Monitoring Plan to the converting irrigation to non-potable sources and upgrading the wastewater plant to reuse affluent and pursue other conservation measures such as water audits and metering.

021522 05:54:30

D. RED HILL ITEMS**2. Non-Action Item - Presentations and Updates Related to Red Hill from the Following:****c. United States Geological Survey – Red Hill Synoptic Groundwater-Level Surveys and Seepage Runs, December 2021 to January 2022**

Mr. Oki thanked Chairperson Case and the Commissioners for the opportunity to present.

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

Mr. Oki presented on data USGS recently collected Following the Red Hill fuel release. The work was done in cooperation with the Navy and collaboration with a number of stakeholders including the Commission on Water Resource Management, and the Honolulu Board of Water Supply. An aerial map was shown of the (3) Shafts and of the Bulk Fuel Facility Storage Tanks. A timeline of the events of November 20 – December 3, 2021, were explained noting the Hālawā Shaft hydrograph of the groundwater levels.

The two main objectives of the study were highlighted and the survey of the data measurements of the (30) wells were noted which can be accessible at <https://waterdata.usgs.gov/nwis>. The participating agencies in the Synoptic Survey included the Navy, The Commission on Water Resource Management, the Board Water Supply, and the USGS. In general, there's a pattern of decreasing water levels as you go from southeast to northwest that is consistent with our previous understanding of water levels in the area. However, there are still uncertainties and limitations of the survey which were highlighted.

PRESENTATION GIVEN BY: Mr. Rylen Nakama, U.S. Geological Survey

Mr. Nakama presented on the data collected of the seepage runs. Seepage runs consists of multiple stream flow measurements collected at select sites along a stream on the same day, and generally under low flow conditions. Seepage runs is basically a snapshot of local stream flow conditions and are useful for determining losing or gaining reaches as well as quantifying those gains or losses. Hālawā Stream has been channelized and heavily developed in certain ways and noting the importance of the Red Hill Shaft discharge as a point of study with the GAC filtered systems.

USGS established 8 sites for the Hālawā Stream seepage run noting that USGS operates 2 gages on that stream with the data of those gages over the years showing Hālawā Stream as having intermittent flow and not flow consistently throughout the year and run dry in summer months and only showing flow in the winter times, or events as in hurricane season. The seepage run results of the North and South Hālawā Stream were shared and explained.

Mr. Oki stated the summary and conclusions of the study and presentation.

021522 06:13:37

D. RED HILL ITEMS

2. Non-Action Item - Presentations and Updates Related to Red Hill from the Following:

d. University of Hawaii – Red Hill Response and Research

PRESENTATION GIVEN BY: Mr. Tom Giambelluca, UH

Mr. Giambelluca presented on the activities that the University of Hawai'i provided in response to the Red Hill crisis which consisted of a broad group of 56 faculty, students, staff, and community members outside of the University and across the U. S. campuses and agencies to assemble expertise to address various multi-faceted aspects of this problem. The UH Red Hill Task Force assist to provide expertise in water quality sampling and monitoring, laboratory testing, analytical lab testing; the groundwater team includes hydrogeology as well as modeling of water flow and contaminant transport; and a team for logistics and coordination of the various activities and communication and outreach.

One of the main areas of contributing to the immediate crisis is by increasing the capacity for water quality analysis as this has been a limitation of the Department of Health, Board of Water Supply, and the Navy in responding and having to send samples to the mainland. The other main focus is on coordination of relevant research in analysis, investigation, and monitoring.

UH has an existing water analytical chemistry lab at the Water Research and are very actively ramping up equipment capacity and soon will be adding personnel to increase capacity in that lab in which the lab is able to do analysis under EPA protocol in regard to the water quality analysis.

A graph of the contaminant level for control samples were shown as well as the residential samples the military housing area. As well as the DOH heatmap area of complaints noted along with the different types of testing methods. The lab and tests can confirm the presence of jet fuel using dilute samples to a detection limit of 10 parts per billion and verified the use of this for the stream and community contributed tap water.

Mr. Giambelluca noted the work of Yinphan Tsang who is doing the surface water sampling and have done surveys of the biological and ecological health of Hālawā Stream in the past which now provides a baseline. Once it was announced that the Red Hill Shaft was going to be pumped with water to pass through a GAC filter and then into Hālawā Stream, Ms. Tsang took additional samples to provide an immediate baseline for subsequent analysis following the beginning of release of the water into the stream. Her team has set up 8 survey sites and done the pre discharge measurements and will do the post and quarterly as well.

The research on the hydrogeology investigations in the Moanalua and Pearl Harbor Hydrologic Units of the Honolulu Aquifer were highlighted and explained. The NSF Rapid proposal to a look at the interaction between the hydrocarbon petroleum contaminants and the microbiology of the groundwater, to produce results that provide new information on how the microbiome is affected and how the microbiological processes affect the contamination.

University of Hawai'i is actively pursuing federal support of various activities such as lab equipment and project studies as well as a request for support of a task force program such as

DoD-Hawaii-USAPI Water Security Program to address the long-term monitoring and comprehensive research.

021522 06:36:08

Chairperson Case thanked Tom and all the presenters regarding the Red Hill issue.

QUESTIONS/COMMENTS

Commissioner Hannahs – (to Commissioner Seto) referred to the reference DOH made of calling the Red Hill issue an “incident” to the fact there were 76 incidents noted whereas UH referred to as a “crisis” as the word “incident” could be misleading to the public perception.

Commissioner Seto – it has been identified as an incident at this time and may be multiple sources for this incident. There's also identified with a hazard evaluation emergency response office incident number.

Commissioner Hannahs – (to Cpt. Meyer) asked if the Navy are the closest to understanding this system (as a whole).

Cpt. Meyer – replied, absolutely when it comes to the well and water distribution system.

Commissioner Hannahs – referred to the added costs since the issue and to the cost benefit in regard to relocation and if it can be shared with the public.

Cpt. Meyer – can't speak to the entire Navy on the future plans of Red Hill but are focused on the remediation and water recover efforts. There's the Secretary of the Navy assessment going on at Red Hill, and a larger discussion on fuel needs across Dept. of Defense and locations.

Commissioner Hannahs – referenced the “Advisory Group” (formally was known as P.I.G.) and asked on having that same discussion with that stakeholder group in the federal chain of command.

Commissioner Buck – replied no, not at the higher levels of cabinet.

Commissioner Meyer – we haven't been invited into that circle yet.

Commissioner Hannahs – (to Cpt. Meyer) asked from an engineering standpoint, can this system work and be reliable?

Cpt. Meyer – I only can speak to the large distribution system and not the operational systems of Red Hill as that's the Navy Supply Systems Command. I can answer to the well and mediation efforts.

Commissioner Hannahs – asked if its possible to get that representation to the table?

Cpt. Meyer – I will see if that's possible to get the representatives here to speak on behalf of the Navy on any Red Hill operational matters.

Commissioner Hannahs – referred to contingency planning and relocation and looking at other sites.

Cpt. Meyer – have done past studies on relocation and further investigations are ongoing. The Secretary of Navy commissioned efforts on Red Hill and as well as other needs as we look at the Department of Defense fuel needs across the Pacific, not just in Hawai‘i.

Commissioner Buck – added that the Navy did an extensive relocation effort and did identify sites, but I believe it was under the assumption it had to be the same size and also be underground. They did identify sites outside of the aquifer on their land that might be opportunities.

Commissioner Hannahs – encouraged the Group to engage also with other branches of the Navy regarding site locations.

Commissioner Kagawa-Viviani – (to Commissioner Seto) what defines safe drinking water when the advisory is lifted?

Commissioner Seto – the guidance to amend the public health advisory included looking at all of the maximum contaminant levels which are normally regulated by the Safe Drinking Water Branch as well as a screening level of the total but cumulative total petroleum hydrocarbons that could be found in the in the water to ensure that all those did not exceed maximum contaminant levels. Other portions of the guidelines include looking to see that the water coming from the source, Waiawa Shaft was clean, and the distribution system flushing was done well and correctly; as well as following our checklists which are included in the removal action report and available online, however the sample reports are not on our web but found on JBPHH website.

Commissioner Kagawa-Viviani – asked on the EALS in regard to the taste and odor threshold; how does DOH give the public assurance?

Commissioner Seto – regarding the total petroleum, hydrocarbon and environmental action level the department has developed a risk-based action level for the JP-5 based on EPA's risk assessment methodology and in accordance with the Department of Health technical guidance or environmental hazard evaluation. Part of the process involves adding extra safety buffers to account for the exact details which are unknown by science. Levels of the chemical found in the water above the levels, do not mean that health effects will occur but below the level is predicted to be safe and these models are used to guide cleanups of spills of hazardous chemicals.

Commissioner Kagawa-Viviani – commented on the difference of the purveyor of water and regulator define as acceptable may differ.

Commissioner Seto – to be clear, the water source is now just the Waiawa Shaft which is nowhere near the location of the Red Hill shaft or The Red Hill Bulkhead Storage Facility.

Commissioner Kagawa-Viviani – clarified in regard to the “tap” water being safe to drink; and asked (the Navy) what are the Navy plans to sort of manage demand as we move into the

dry season?

Cpt. Harmeyer – we are watching very closely our water usage as we're close to our limit of that particular well and we can't meter every single type of usage but look at minimal irrigation and reviewing closely on a daily basis on how it affects the draw at Waiawa and look at any other operational mitigations to take on the installation of other types of water uses as we don't have a major industrial use of water that we can reduce. We're aware we have a limit and have a mission on the base.

Cpt. Meyer – added that we're about 30-40,000 gallons, over I permit over the last month which was due to an unusually high usage amount as we were flushing the distribution lines and homes and don't think it should counteract with that flushing of the system.

Commissioner Meyer – (to Mr. Giambelluca) asked on the mobility and persistence of petroleum-based contaminants in a confined aquifer, could you characterize kerosene or JP 5 relative to other kinds of petroleum-based contaminants, like gasoline diesel, residual fuel oil? And how does kerosene match up in terms of mobility and persistence?

Mr. Giambelluca – certainly well outside my own area of expertise and deferred to Ms. Catherine Rong, Lab Tech at UH.

Ms. Rong – can't say much about the mobility but as far as detecting the different types of petroleum hydrocarbons like kerosene versus Jp-5 versus anything else, we would be able to see a difference because those fuels contain different types of compounds, they're going to show up differently on the chromatogram. We would be able to make some sort of identification provided that we have those standards for the other types of fuels.

Mr. Don Thomas, UH – added that in general, the lighter hydrocarbons are the less persistent; the heavier heart hydrocarbons are more persistent in the environment; and likewise, gasoline would be considered a lighter end and bunker fuel are on the heavier end. If wanted to know what the persistence is here, we probably need to do so testing under conditions that mimic conditions under Red Hill.

Commissioner Katayama – (to Mr. Giambelluca) referenced the slide referring to the grant pursuing for testing facilities in respect to assure a quality aquifer with the quantity and quality of water.

Mr. Giambelluca – we want to be able to investigate all known and unknown contamination that has occurred around DoD or in DoD facilities throughout Hawai'i and other U.S. affiliated Pacific Islands, and look at it from every perspective such as what are the transport mechanisms, the fate, how is it being degraded by the by microbes, how effective have remediation efforts been, if there have been any. And looking at toxicology and all the social science aspects as well as unknown sources that may be future threats around DoD. We intend it to be very comprehensive water security program.

Commissioner Katayama – is that something that will be applicable for what we're looking at in water management areas where we need to protect the water resources as we get urbanization.

Mr. Giambelluca – yes; we are targeting funding source of DoD and will have some ties to military installations, but we can generalize a lot of these problems if we are addressing these issues around military bases but, is still under development and discussions and will need to be presented to our Congressional delegation.

Commissioner Buck – (to Commissioner Seto) asked if DOH has seen the letter of request by the Group in regard to equal partnership as part of DOH Emergency Order in regard to evaluate the safety of the Red Hill facilities.

Commissioner Seto – We are consulting with our attorneys as this was a result of an Administrative Order so the Department of Health is the party so we'll consult with our attorneys, and certainly you're able to get the documents and we would accept any comments. The water that caused the contamination was from the Red Hill Shaft and the water being given to the current residents are from Waiawa Shaft. The DOH along with EPA and Navy has tested that water and found it to be safe for drinking.

Chair Case – are we actively monitoring the groundwater levels at Waiawa Shaft to determine whether there's an impact of the increase pumping on any water dependent ecosystems are, farming, cultural practices, or other uses?

Mr. Jeremy Mitchell – pumping at Waiawa hasn't really increased substantially since the beginning of this event. The levels indicated by our transducer hooked up to our Skates system have been consistent across the past 2 years and have not changed since the event.

Chair Case – what about the impact of the shutdown of Hālawā Shaft on groundwater levels on other wells and pumpage to the west? We're pumping 5,000,000 a day out of the Red Hill Shaft to keep ensure contamination doesn't spread but it's not necessarily a short-term thing; and because we're not pumping water from the Hālawā Shaft to provide water to people of Honolulu, we're pumping more water from other shafts, are we monitoring those groundwater levels? And progress on groundwater modeling? What are the impacts to the aquifer in terms of movement of contamination and supply of water?

Mr. Ryan Imata, CWRM Groundwater Branch – the Navy submit to us daily pumpage and also receive chloride data on a weekly basis which provides good indication of aquifer health as they started to increase pumpage on Waiawa. We are continuing to collect that data and have since requested data from Red Hill Shaft during the remediation efforts and are getting on top of Honolulu aquifer system data as we're coming out of the winter months and increase reliance on the HBWS.

Our Survey branch does have a deep monitor well a mile from Waiawa Shaft and are monitoring that too and to ensure that increased pumpage in any area doesn't have detrimental environmental impacts.

Deputy Manuel – added as Ryan was speaking more specifically to the water resource, but regard to GDE or springs, no one is actually managing, monitoring or collecting that data and you've highlighted a big data gap. The current uses happening in Waiawa or at the Sumida Farm, are based on existing or historic pumping. Understanding with climate change being a discourse shifting pumping throughout this region, we should start to consider and look at how do we collect and monitor those additional metrics and fill those data gaps and could

consider as a Commission for well users to make sure that they're mitigating their impacts on resources and other public trust uses.

Commissioner Hannahs – it's not too late as Waiawa pump is pumped at an historic average as its not yet having to supply the needs of the people displaced and when they move back home, that's when we could see the impact you're referring to and should get those monitoring in place in time to start monitoring that.

Mr. Imata – added, we have deep monitor wells in other locations that we routinely take water levels and chlorides. We have a robust network of Monitor Wells for Pearl Harbor specifically in the region of Waiawa.

Commissioner Buck – we're concerned with the East-West movement of water and how it could affect the Hālawā Shaft and Travis (Hylton) has been doing a great job in coordination of agencies to come up with priorities but, how can we help you expedite determination of wells once we determine where all the wells need to be?

Mr. Hylton – the permit applications are in for the 10 wells and 8 locations on the site and those are on Navy properties so they can go quicker. There is a full permit process that your staff is expediting and certain requirements that to be processed through Historic Preservation and got our cultural resources SMEs to ensure there's not imposing on any cultural artifacts.

As we identify the sites, the whole cooperative team the Board of Water, CWRM staff, and the Department Health are going out to ground troop sites looking at what the considerations are. There are many things that go into it in terms of landowner, potential for legacy contaminations from other sites from leaky underground storage tanks off-site, and logistical matters; but very appreciative of staff's assist and have been in close communication and will continue to communicate in what can be done to help the process along.

Commissioner Buck – commented that Governor may be able to issue an Emergency Order to expedite permitting issues from the State as it can take years for all that to happen and we don't have that kind of time.

Mr. Imata – added we convened the multi-agency meeting yesterday and we all weighed in our priorities for monitor well locations, the multi-agency group consisted of CWRM, EPA, Board of Water Supply, USGS, the Navy, and DOH, and came up with a list of 10 wells to be the primary focus of installation for this year.

Commissioner Kagawa-Viviani – (to Mr. Hylton) regarding treatment at Red Hill Shaft, what is the limit of detection on your methods and what are we cleaning in this process?

Mr. Hylton – (*spoke of the types of contaminant and detection levels*) and noted the GAC system is not meant to be water cleaning system for fuel recovery, it's an environmental protection for what we're discharging to the stream. The recovery is happening through the skimming and the absorbance in the well. We're looking to keep the influence low, so that we can prolong the get the life of the media (GAC). There's also organo clay that's protective of any slugs that may come through

Commissioner Kagawa-Viviani – asked if skimming was continuing while the GAC treatment is ongoing.

Mr. Hylton – the skimmer is not used while the pumping is happening as it will affect pumping as the water level is moved. Barrell skimmers are used within the shaft to collect any product off the surface passively, that will rise and fall with the water level as its pumped.

Cpt. Meyer – there's also absorbent pads in place.

Mr. Hylton – *further explained the process of the use of the absorbents.*

Cpt. Meyer – added there's not a significant amount of emulsion of product on the top. In the last month through those absorbing pads, we've collected about 10 gallons of a fuel.

Commissioner Kagawa-Viviani – referenced on the fuel-water mixture released how do you know what you're doing is effective in terms of containing contamination to the shaft? Were there elevated levels at the existing monitoring wells around the tank farm?

Mr. Hylton – the existing monitoring wells around the tank farm have had levels at times above the EAL which has been more frequent since May 6th and November 20th but are intermittent and hard to define what's actually happening and why it's so crucial to get more monitoring wells so we can better characterize it. And in knowing how the capture zone is going to be effective rides on the 10 new monitoring wells.

Commissioner Kagawa-Viviani – asked on the release if it was 19,000 gallons of straight fuel?

Cpt. Meyer – it is part of the Pacific Fleet Command Investigation which has not been released and are not sure of the exact number; there were (2) incidents related which is the May 6th and November 20th.

021522 07:23:06

PUBLIC TESTIMONY

Chairperson Case noted that Dr. Beamer was a very long-esteemed member of the Commission

Dr. Kamana Beamer, Ka'ohewai Coalition/O'ahu Water Protectors – Mahalo for having me here and thank you for holding this important hearing and meeting. Aloha to Chair Case and Commissioners, you folks are champions, it's been a long day. There's a number of important issues that folks are hearing and still see you working hard and being attentive on this particular issue.

I have a couple of comments here. I really want to applaud the presentation that I saw from the Working Group, the P.I.G. I really want to stress some of the things that I saw as it is very clear by the code you folks have a broad authority and you are the overall trustee over wai. I want to support this investigation in terms of linking the Navy's water usages to

decommissioning the tanks. Like Commissioner Viviani stated, we still don't actually know what happened. There're multiple reports this November 20th release that was initially 1,600 now might be 19,000 and I've seen 20,000. Somehow that's related to a May 6th release.
(Dr. Beamer continued public testimony)

Now the new story is that fuel sat for months and apparently leaked again in May. David Day was correct that this is a ticking time bomb. It hasn't been properly managed and after all these months we still don't even know what happened and don't know where the plume is. I've met some of the families at an event this past week. A woman whose daughter ingested fuel on base, that still has detectable levels of fuel in her bloodstream. This is really serious and egregious.

I believe the Commission has the authority to link water usages to the decommissioning of the tanks. This is a continued threat to the source. Some of the analogies that I would use, this is like a de facto. Essentially the Navy's poisoning or contaminating the Hālawā aquifer is going to affect other users rights, and like a decreased sustainable yield for all of O'ahu.

If this was a stream for instance, and you had a user of the stream that was damaging all downstream users and potentially for years or decades, the Commission would take broad authority to address that event and that damage that was being done to other users. So, I think you folks have broad authority.

With the wells that aren't being pumped as these questions are emerging, that plume is still moving, it's going somewhere. I think testing in the springs like we heard from Tom Giambelluca and others is critical and important for the long-term but addressing the immediacy of the threat that we still don't know what's going on, is paramount. In this unprecedented crisis, this has never been tested by the water code; we've never been here before. I want to stress this is something if the AGs feels we don't have the authority to link those things, is something worthy of fighting in court. It's never been determined and ultimately you folks have qualified immunity as long as you are taking the precautionary principle and trying to protect the public trust. The AGs are there to advise you. You may even consider getting outside Council because this is such an unprecedented crisis an issue.

I'll be monitoring and just thankful for your work and efforts. Again, this is the most egregious assault to Hawai'i's public trust I think ever and strongly encourage you to use all tools and authorities at hand to mitigate this, Mahalo nui.

PUBLIC TESTIMONY (CONT'D)

Ms. Gina Hara – Hi. Thank you for the opportunity to speak again. This is the second most best meeting the injunction hearing that I've been to over the last 7 years. There are so many things I want to say, but it's important to address the 100 parts per 1,000,000,000 is what the Board of Water has always said is the safe EAL amount. There are 5 letters going back and forth between the Department of Health and the Board of Water, begging them to please consider 100 parts per 1,000,000,000 because at 160 parts per 1,000,000,000, you can smell the petroleum.

What happened was the Red Hill Well, the R. H. spiked at 1,600 after 2014. When it spiked the Department of Health raised the EAL to 400 parts per 1,000,000,000, which was objected

to by the BWS and they're not here today. What concerns me, is now it went down to 300 and in Christina Jed article quoted 300, another time it went to 200; this is from the public's point of view, and when they say safe levels, it seems many times more dangerous.

The same thing happened with the 1,600 spiked parts per 1,000,000,000. That's 16 times the danger just in the monitoring well. I wanted to bring that up and sorry if I sound rude.

The second thing is in 2014, the 17 patches that they were using to test the tanks, they forgot to put it back and the alarms did go off and that's why there was this huge leak over several days. The Navy always will say it's a human error whenever we went to go testify these past 7 years and human error is significant. In a Taiwanese study I looked up wanting to know what other people do around the world, international studies show that 60% of catastrophic leaks come from human error. In Fukushima, it was human error the lack of judgment, an accident.

I know the Navy might be here, but I'm not trying to attack you; we just got to talk about it like this. At the time as a public person from Hālawā Valley, I ran to the Department of Health and asked them about that. It was like my whole presentation was on microorganisms. I said, how come we don't prepare for this kind of spill? Right now, we should flush it with microorganisms to chase the fuel, the JP. We should have a fire engine ready to put it down the hole and why aren't we using Korean natural farming that makes the indigenous microorganism with the JP-8 fuel-eating microorganisms which lives around there, attenuate them, make slurry, and take care of it right now. Every time I went to a meeting, I would grab the highest official Navy person and tell them this idea and you can imagine what happened.

Then there would be a second great meeting where they don't want the public to talk or 400 people testifying, they just want to show the scientists and meet and greet. With every scientist, I gathered them together and asked what do you think of this idea? They all said, it's a great idea and the Navy PR person would try to shut me up and say, there's no scientific study for that; how do you know that works? I said, they just said it was a great idea; it doesn't cost hardly any money. They're using microbes on their testing and all we need to do is try some indigenous with theirs, test it on the core samples and see if there are any byproducts or further dangers. If you are talking about remediation, that's remediation not a paper study.

My suggestion to you CWRM is the amount of toxins coming in, not just with the military, but in general, any chemical if you don't calculate where it's going in the out, it's staying in our environment and going into the water. So, you need to invest heavily in micro mediation. It's come a long way since in 2019. There's a lot of idle remediation, I will send you the links. Thank you for your time.

PUBLIC TESTIMONY (CONT'D)

Ms. Rebekah Garrison, Hawai'i Peace & Justice – Good afternoon, Commission. I am a water drinker, a member of O'ahu Water Protectors and a community organizer for Hawai'i Peace and Justice. Hawai'i Peace and Justice is a grassroots organization that strives to create a more peaceful, just, and sustainable Hawai'i. Thank you to the Commission on Water Resource Management for prioritizing the protection of the island's most precious

resource the clean, unpolluted drinking water.

Hawai'i Peace and Justice strongly supports the immediate defueling and permanent decommissioning of the entire Red Hill Bulk Fuel Storage Facility. The Navy's negligent behavior concerning Kapukaki also widely known as Red Hill, is nothing less than an assault of the public trust. Poisoning the aquifer since the facility's inception, the Fuel farm at Red Hill has been grossly mismanaged. from the beginning of construction.

None of us know with absolute certainty how much fuel has been released from this corroding facility nor where the fuel plume is migrating to. After 72 leaks dating back to 1947, the Navy has put its own service members and all of O'ahu in crisis. As a result, the public, those fellow water drinkers you all swore to protect, no longer trust the Navy to safely operate their wells. Considering that the Navy has put all of our lives and livelihoods at risk, Hawai'i Peace and Justice requests the Commission to do everything in its power to urgently act to protect public trust resources. Please protect the fresh drinking water of hundreds of thousands of O'ahu residents before it is polluted beyond repair.

It does not take a rocket scientist to know that storing fuel over an aquifer is not a good idea. Proving time and time again, the Navy cannot adequately maintain the 20 corroding fuel tanks holding 200,000,000 gallons of fuel in mere 100 feet above O'ahu sole source aquifer. None of us asked for this burden much less Kapukaki. Drain the tanks, shut down the facility, and prioritize the lives of all who call O'ahu home. Again, the public does not trust the military. One thing is for certain, in the next few months, we will continue to be fed lies by the United States Navy, but we trust that you commission, will do the right thing, thank you very much.

PUBLIC TESIMONY (CONT'D)

Ms. Marti Townsend – I'm testifying on behalf of Earth justice. Thank you very much for this opportunity. I also wanted to make a point to thank the members of the Permanent Interaction Group for their hard work. It really did show in the presentation. I also want to take a moment to thank Commissioner Seto for her work. She really has been working very hard before the water crisis began and you can continue to see that she is working day in and day out, and I really wanted to acknowledge her. It is clear that Commissioner Seto and Department of Health need a lot of help that there are huge data gaps.

There is no one monitoring the impact to the streams, taro farms, fishponds and to the near shore waters. I strongly urge the Commission to actively engage on Red Hill, to walk hand in hand with the Department of Health to protect the waters of O'ahu. It is a huge oversight that the Board of Water Supply is not here to testify. I can't understand how that could possibly be justified. The next hearing on Red Hill needs to include the Board of Water Supply. They have the most up-to-date information and best view in terms of what's really going on. Most importantly, they have the trust of the public.

It needs to be a trifecta of local and State leadership that protects the watershed and the drinking water supply. We do support the idea of the Water Commission using its authority to regulate water use through permits to direct the decommissioning of this significant threat to the drinking water supply of O'ahu and stream water resources, thank you very much.

(end of public testimony)

QUESTIONS/COMMENTS

Commissioner Kagawa-Viviani – (to USGS) asked to briefly explain the first figures on the presentation slide relating to the hydrograph.

Mr. Oki – both Red Hill Shaft and Hālawa Shaft contributed to the recovery, but mostly Halawa as that’s where we’re monitoring.

Commissioner Kagawa-Viviani – asked on the increase from 13 feet to 16 due to Hālawa Shaft shutting off or both?

Mr. Oki – both shut down on roughly the same time. After Red Hill Shaft shut down, perhaps BWS started reducing pumping on the Hālawa Shaft end of November, early December.

021522 07:43:09

*Chair Case thanked all participants and motioned to go into Executive Session.
Commissioner Meyer thanked everyone who participated as it was enlightening and heartfelt.*

MOTION: (CASE/HANNAHS)

To go into Executive Session to consult with attorney on questions and issues pertaining to the Commission's powers, privileges, immunities and liabilities pursuant to HRS 92-5(a)(4)

UNANIMOUSLY APPROVED

CASE/BUCK/HANNAHS/KAGAWA-VIVIANI/KATAYAMA/SETO

RECESS: 5:15 PM

RECONVENE: 6:03 PM

E. NEXT COMMISSION MEETINGS (TENTATIVE)

March 15, 2022 (Tuesday)

April 19, 2022 (Tuesday)

This meeting adjourned at 6:04 p.m.

Respectfully submitted,



RAE ANN HYATT
Commission Secretary

OLA IKA WAI:



M. KALEO MANUEL
Deputy Director

***Please refer to the Commission's website at:
<https://dlnr.hawaii.gov/cwrm/newsevents/meetings/> to read/view the written
testimonies received.***



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

STAFF SUBMITTAL

COMMISSION ON WATER RESOURCE MANAGEMENT

February 15, 2022
Honolulu, O'ahu

Accept Chairperson's Recommendation to Designate the Lahaina Aquifer Sector, Maui
as a Surface Water and Ground Water Management Area under HRS Section 174C-41, and to
Notice and Hold a Public Hearing

SUMMARY OF REQUEST:

Action; The purpose of this submittal is to continue the designation process, initiated by recommendation of Chairperson, of the entire Lahaina Aquifer Sector, Maui as both a Surface Water and Ground Water Management Area based on threats to water resources as identified from factual data presented in Exhibit 1.

DESIGNATION PROCESS:

The process to designate a ground and surface water management area (WMA) is described in Hawai'i Revised Statutes (HRS) § 174C-41 to -46 and Hawaii Administrative Rules (HAR) § 13-171-3 to -9. The process follows these general steps:

- (1) Recommendation to designate by the Chairperson or by written petition for initiation or continuation of investigation of the situation in the proposed management area; HRS § 174C-41(a).
- (2) Consultation with county council, county mayor, and county water board concerning the recommendation or petition HRS § 174C-41(b).
- (3) Commission action to accept recommendation regarding designation of water management area and to hold public hearing. HRS § 174C-42.
- (4) Notice for and Conduct of Public Hearing. HRS § 174C-42.
- (5) Commission action to approve findings of fact and accept, deny, or defer recommendation to designate a water management area HRS § 174C-46.

This submittal refers to step (3).

CURRENT STATUS:

On November 29, 2021, the Chairperson initiated designation proceedings and began consultation with the County Council, County Mayor, and County Board of Water Supply via formal letter.

The Commission received responses from the County Council dated December 7, 16, and 29, 2021 with clarifying questions requesting data, a request to present to the County Council, and to understand the designation process and timeline. The Commission responded with letter dated December 17, 2021.

On December 28, 2021, the Commission received a response from Maui County Department of Water Supply (MDWS).

On January 18, 2022, staff presented an informational item to the Commission on Chairperson's initiation of designation proceedings for the Lahaina Aquifer Sector Area as both a Surface and Ground Water Management Area and responses received from Maui County Council and MDWS.

Commission has received written testimony in opposition from MDWS and Wainee Land and Homes, LLC. Written testimony in support was provided by the Department of Hawaiian Home Lands (DHHL), Nā Papai Wawae 'Ula'ula, and the West Maui Preservation Association, as well as seventeen individuals. Oral testimony in support was provided by DHHL, Councilwoman Tamara Paltin, the Sierra Club Maui Group, Hui O Nā Wai 'Ehā, West Maui Preservation Association, Hui Nā Mamo Aloha 'Āina o Honokōhau and six individuals.

On January 20, 2022, Commission staff presented at the Maui Board of Water Supply monthly meeting. Subsequently, the Maui County Board of Water Supply unanimously voted to support designation of the entire Lahaina Aquifer Sector Area as a surface and ground water management area.

To date, the Commission has not received a response of the Maui County mayor's office and no further formal communication from the County Council. There was an informal inquiry for the Commission on Water Resource Management (CWRM) to attend a future County Council meeting to present, but that has not been confirmed at the date of finalizing this submittal.

SUMMARY OF TESTIMONY:**Serious disputes over surface and ground water**

The written and oral testimony of community members in the Lahaina Aquifer Sector Area unanimously referenced serious disputes over water and requested designation as proactive management. Testimony by the Hui Nā Mamo Aloha 'Āina o Honokōhau, Nā Pāpa'i Wawae 'Ula'ula, the West Maui Preservation Association, the Sierra Club Maui Group, and the Hui o Nā Wai 'Ehā also state conflicts over water. The concerns raised are that established IIFS are not being met, water continues to be diverted and prioritized for off stream uses while protected

instream uses and Kuleana families do not have sufficient amounts of water.

West Maui Preservation Association's written testimony outlines the historic and ongoing conflicts over water use in Ukumehame, Olowalu, Launiupoko, Kaua'ula, Kahoma, Kanahā, and Honokōhau while highlighting conflicts over surface and groundwater in the Launiupoko aquifer that are part of a proceeding before the Public Utilities Commission (PUC).

Staff response:

The community member's testimony resembles what staff has experienced in the numerous informal and formal complaints in the past decades. To holistically address these serious disputes, staff recommends designating the whole Lahaina Aquifer Sector Area as a surface and ground water management area. The Hawaii Supreme Court held that the Commission is the "primary guardian of public rights under the trust. Haw. Const. art. XI, section 7. As such, the Commission must not relegate itself to the role of a mere "umpire passively calling balls and strikes for adversaries appearing before it," but instead must take the initiative in considering, protecting, and advancing public rights in the resource at every stage of the planning and decision making process."¹

Staff notes that CWRM is not a party in the proceeding before the PUC regarding Launiupoko Irrigation Company's (LIC), LLC request for a rate increase, but has provided extensive public comment to the PUC on LIC's off stream uses, staff's data that indicate LIC's non-compliance with the IIFS for Kaua'ula stream, and a new pump installation at the Lahaina A/B skimming well (State Well No. 6-5240-002). See Exhibit 1 January Staff Submittal's Exhibit 1 CWRM Public Comment to PUC December 17, 2021.

Enhanced protection of the resource and public trust uses

Community members voiced grave concern over the lack of available stream water and streamflow to cultivate lo'i kalo and to exercise traditional and customary Native Hawaiian practices that rely on water in its natural state, mauka to makai flow, and healthy native stream fauna.

With regards to groundwater, oral testimony of community members and the Hui Nā Mamo Aloha 'Āina o Honokōhau, the West Maui Preservation Association, the Sierra Club Maui Group, the Hui o Nā Wai 'Ehā all stated concern over rising chloride levels in wells, lack of water use reporting of wells, and increased pumping while recharge is uncertain due to the climate crisis.

DHHL's written testimony outlined the benefits of designation for its beneficiaries; the increased legal protection of its surface and groundwater reservations by administrative rule and the requirement that water use permits are subject to the rights of DHHL. Additionally, DHHL's oral testimony also pointed out that the Commission's ability to regulate groundwater is limited to three factors, namely the existence/location of a well, its depth, and the amount of water that can be pumped.

¹ *In re Water Use Permit Applications (Waiāhole I)*, 94 Hawai'i, 97, 143, 9 Pd.3, 409, 455 (2000).

Staff response:

WMA designation expands the tools available to the Commission to proactively protect water resources and regulate reasonable and beneficial uses of water, including public trust uses. The water use permit application process requires water users to disclose the purposes and amounts of their uses, which then are subject to the Commission's determination as to how to protect public trust uses affected by it.

The Hawai'i Supreme Court has recognized four public trust purposes; the maintenance of water in its natural state, domestic water uses, water for the Department of Hawaiian Home Lands, and water use in the exercise of traditional and customary Native Hawaiian rights.² Private commercial uses are not protected by the public trust and are subject to a "higher level of scrutiny."³

Staff recognizes that while the depth and instantaneous pump capacity (gallons per minute) are dictated by the Well Construction and Pump Installation Standards approved by the Commission, management of well location and amount of water use on a daily basis (gallons per day) can only be regulated in a designated WMA.

Constitutional duty to protect before crisis develops

DHHL's written testimony highlights the Commission's constitutional duty to protect the public trust resource water before a crisis develops citing to the 1978 Constitutional Committee Report 77, pages 688-689, "[a]ccordingly, your Committee concluded that the Constitution should specify that the State holds the water resources in trust, with the responsibilities of a trustee to actively protect, control and regulate the development of water resources in the State. This concept implies not only the power to protect the resources but the responsibility to do so long before any crisis develops."

Staff response:

Staff's research on the legislative history of the Water Code found a similar intent in the House Committee Report No. 348 on House Bill 35, that became Act 45 of the Session Laws of Hawai'i and established HRS Chapter 174C in 1987, "[t]o ensure that the availability of this precious resource will meet the present and future needs of the people, your Committee is of the opinion that the water code should serve as a tool and an incentive for planning the wise use of Hawai'i's water resources, rather than as a water crisis and shortage management mechanism."

Scientifically proven facts

Wainee Land and Homes LLC ("Wainee") sent its written testimony on the day of the Commission meeting on January 18, 2022, at 11:27am. Wainee asserts that the Commission has a 'duty to

² See *Kauai Springs, Inc. v. Planning Comm'n of Kaua'i*, 133 Hawai'i 141, 172, 324 P.3d 951, 982 (2014).

³ *Id.*

designate based on “scientifically proven facts” citing *In re Water Use Permit Applications*, 94 Hawai‘i at 155, 9 Pd.3 at 467 (2000) “[T]he Code contemplates the designation of the standards based ... on scientifically proven facts[.]”

Staff response:

This quote refers to the setting of interim instream flow standards (IIFS) and not the designation of water management areas. The full quote is “[n]or does present inability to fulfill the instream use protection framework render the statute’s directives any less mandatory. In requiring the Commission to establish instream flow standards at an early planning stage, the Code contemplates the designation of the standards based not only on scientifically proven facts, but also on future predictions, generalized assumptions, and policy judgments.” This sentence includes footnote 60 of the opinion which also points to the standard for designation that is actually applicable here “[...] cf. HRS § 174C–41(a) (requiring the Commission to designate water management areas “[w]hen it can be *reasonably determined*, after conducting scientific investigations and research, that water resources in an area may be threatened” (emphasis added)). [...]”

Precautionary Principle

Wainee denounced “the Commission’s reliance on a “purported “climate crisis” and “Precautionary Principle.” MDWS also criticized the Commission’s approach as “overzealous” and “too cautious” in its oral testimony.⁴

Staff response:

The Commission’s duties under the constitution and Water Code embody the precautionary principle, which holds that scientific uncertainty should not be a basis for postponing effective measures to prevent environmental degradation.⁵ Rather, the Commission as a trustee has a duty to take anticipatory action to prevent harm to public resources. “[A]t minimum, the absence of firm scientific proof should not tie the Commission’s hands in adopting reasonable measures designed to further the public interest.”⁶ In endorsing the precautionary principle, the Hawai‘i Supreme Court rejected the requirement of scientific certainty before acting to protect public trust purposes, noting that to do so will often allow for only reactive, not preventive regulation.

Maui County’s Water Use and Development Plan cannot substitute designation

Testimony by the Sierra Club Maui Group, Hui o Nā Wai ‘Ehā, DHHL, West Maui Preservation Association and several individuals pointed out that the Maui Water Use and Development (WUDP) cannot function as a substitute for designation. There are four other private water companies besides MDWS whose well placement, pumping and water use the WUDP cannot regulate. Only the Commission has the authority to do so in a designated WMA.

⁴ Oral testimony by Jeff Pearson on behalf of MDWS.

⁵ *Waiāhole I*, 94 Hawai‘i at 154, 9 Pd.3 at 466.

⁶ *Id.* at 155.

Individual testimony shared that public participation in the planning process was for “damage control” to the impacts on public trust uses such as traditional and customary Native Hawaiian practices. Another concern is that MDWS cannot ensure the protection of protected public trust instream uses, especially when the County themselves is not compliant with the IIFS set for Kanahā and has not returned streamflow.

Staff response:

A WUDP is a plan and guidance document unlike the enforceable water use permitting regime of the Water Code that ensures due process rights. In its Draft WUDP, Maui County also recognizes its limitations to regulate and plan for use of the other private water companies as these systems are not interconnected and each is independently operated and maintained.⁷ “The private public water systems were requested to provide demand projections but most did not supply information.”⁸ MDWS’s water use only accounts for 35 percent of the municipal groundwater use and 15 percent of municipal surface water use.⁹ There are six municipal water systems using either surface water, groundwater or both in the Lahaina Aquifer sector area, with “public water systems” as defined by the Department of Health (DOH) (systems serving more than 25 people or 15 service connections). See Table 1. The location of the public water systems is shown in Figure 1.

Additionally, Hawaii Water Service Company, Launiupoko Irrigation Company, LLC (LIC), and Olowalu Water Company provide non-potable water to their respective service areas and are regulated by the Public Utilities Commission (PUC). The non-potable water source is stream water. Staff has data that indicate that LIC has not been compliant with the IIFS for Kaua‘ula stream, Olowalu Water Company has not been compliant with the IIFS for Olowalu stream, and that MDWS has not been compliant with the IIFS for Kanahā stream. These potential violations of the IIFS will be addressed in forthcoming Commission meetings.

Table 1. Public Water Systems in Lahaina ASEA

DOH No.	System Name	Operator
204	Kapalua	Hawaii Water Service Company
205	Kaanapali	Hawaii Water Service Company
209	Olowalu	Olowalu Elua Associates (Olowalu Water Company)
214	Lahaina	DWS Maui
218	Honokohau	DWS Maui
251	Mahanalua Nui Subdivision	Launiupoko Water Company, Inc.

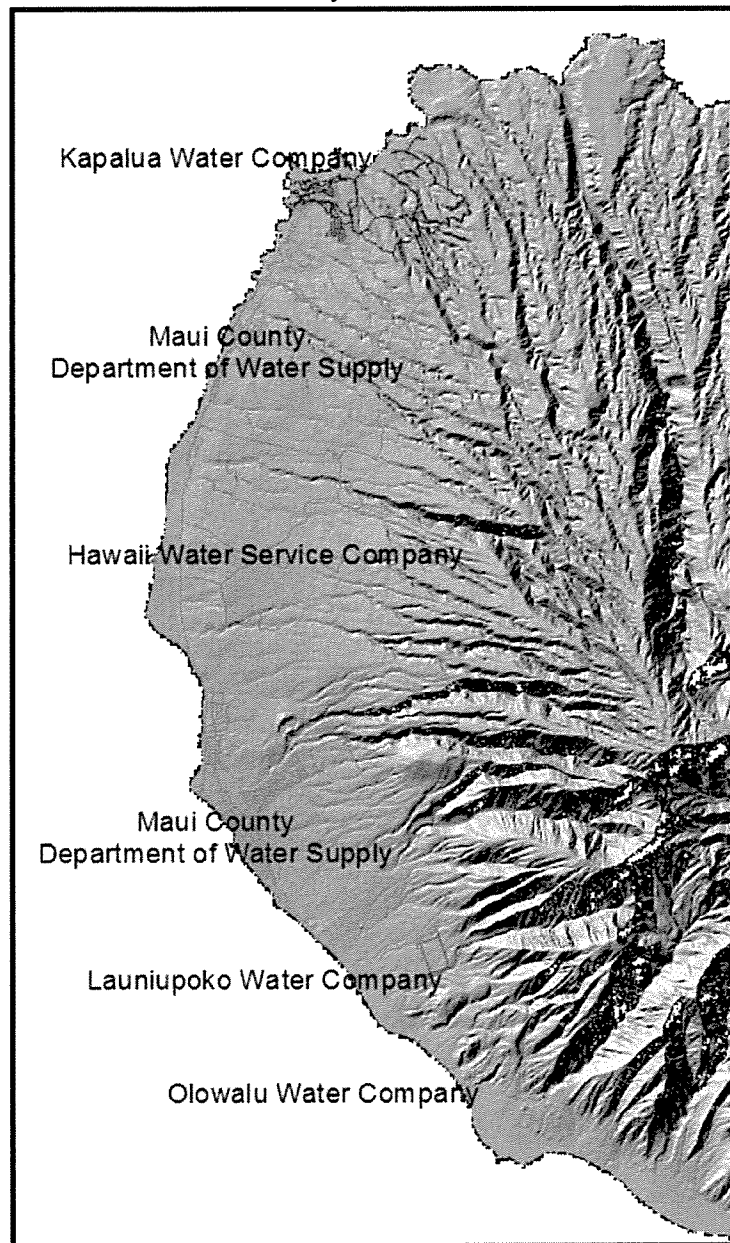
Source: DOH, list of regulated Public Water Systems as of 02/08/2022.

⁷ See Maui WUDP Draft under 19.5.1. Water Use by Type, Municipal Use at page 34 of the Lahaina Aquifer Sector Area.

⁸ Maui WUDP Draft under 19.6.4 Population Growth Based Water Demand Projections (20-Year), Private Public Water Systems Demand Projections at page 63 of the Lahaina Aquifer Sector Area.

⁹ Maui WUDP Draft under 19.5.1. Water Use by Type, Municipal Use at page 34 of the Lahaina Aquifer Sector Area.

Figure 1. General Location of Public Water Systems in the Lahaina ASEA



Source: Maui WUDP Draft (2019), note that Kapalua Water Company has been purchased by Hawaii Water Service Company from Maui Land & Pineapple Company in March 2021.

Climate uncertainty and the Sustainable Yield

DHHL’s oral testimony cautioned that the “sustainable yield (SY) as calculated is the maximum amount of groundwater that can sustainably be withdrawn for future withdrawal, if wells are optimally placed, if recharge is evenly distributed, if wells are at the same depth and pump at the same rate, and recharge does not change over time.”¹⁰ In the calculation of the current SY numbers for the aquifers in the Lahaina Aquifer Sector Area climate change has not been considered as explicitly stated in Appendix F of the Water Resource and Protection Plan (WRPP) of 2019.

Staff response:

The WRPP does recognize that further investigation in the rate of natural recharge for SY is needed. “Climate change and data from the last 25 years should also be included into recharge analysis.”¹¹ As referenced by U.S. Geological Survey’s presentation at the Commission’s meeting on January 18, 2022 Item A1, island-wide recharge is expected to decrease for the mid-century and dry-climate scenarios on the islands of Kaua’i, Oahu, Moloka’i, Lana’i, Maui, and Hawai’i. Reduction in recharge in the Lahaina Aquifer Sector area range between 6.8-67.0 %.

Need for comprehensive approach

Testimony by the Sierra Club Maui, Hui o Nā Wai ‘Ehā, DHHL, West Maui Preservation Association and several individuals lauded the Commission’s comprehensive approach and intent to designate both surface and ground water WMA for all aquifer and hydrologic units in the Lahaina Aquifer Sector Area.

The Sierra Club Maui Group highlighted that only designating Honokōwai and Launiupoko Aquifer would not protect the aquifer because there are no geographical barriers in the Lahaina Aquifer Sector Area and the aquifer is a thin as it does not hold recharge in place as the ‘Īao aquifer.¹²

DHHL’s oral testimony specifically provided an example for the need to designate adjacent aquifers; in 2004, shortly after the Commission decided against the designation of the Waihe’e aquifer, which borders the designated ‘Īao aquifer, a new well construction permit application was received with the well location being right next to the aquifer boundary.¹³

Staff response:

At the 2004 February Commission meeting, the Commission rescinded automatic triggers for the designation of Waihe’e aquifer set in November 2002 and limited the amount of MDWS’s pumpage from the Waihe’e aquifer from 4.5 mgd to 4 mgd via a memorandum of agreement

¹⁰ Oral testimony by Dr. Jonathan Likelike Scheuer on behalf of DHHL.

¹¹ Appendix F, WRPP (2019) at page 68.

¹² Oral testimony by Lucienne DeNaie on behalf of the Sierra Club Maui Group.

¹³ Oral testimony by Dr. Jonathan Likelike Scheuer on behalf of DHHL.

(MOA)¹⁴, which then MDWS Deputy Director Jeff Pearson was a part of.¹⁵ Only three months after the Commission's attempt to limit the amount withdrawn from Waihe'e aquifer, Commission was obligated to approve the new well construction and pump installation permit (WCPIP) of Koolau Cattle Company (Randy Betsill), Waihee Equestrian well (Well No. 5731-06), at its May 2004 meeting because the Waihe'e aquifer was not a designated WMA and the Commission did not have authority to deny this permit request due to correlative rights of the applicant.¹⁶ In the same year Koolau Cattle Company applied for an additional WCPIP, Waihee Equestrian II well (Well No. 5731-07). This permit did not come before the Commission due to the Commission's delegation of WCPIP to the chairperson in 1997 to issue WCPIP administratively; the first application was brought to Commission to highlight issues with MDWS MOA and the recent history of the Waihe'e aquifer system. To date four additional wells have been drilled in the Waihe'e aquifer with two pending completion approval.

Staff recognizes the limitations from only designating the 'Īao aquifer as a "*lesson learned*" and strongly recommends including adjacent aquifers for proactive and comprehensive management, especially due to decline in recharge because of the climate crisis.

Additionally, staff would like to highlight that the ditch systems in the Lahaina Aquifer Sector Area cross multiple aquifer systems and surface water hydrologic units. (See Figure 2) *In Waiāhole I*, the Hawai'i Supreme Court also held that the Commission can consolidate the regulation of a single system because it comports with the Commission's function of comprehensive water planning and management.¹⁷ The Court ruled that the areas covered by the ditch system are to be considered hydrologically controllable irrespective of hydrologic units under HRS § 174C-50 (h) which deems uses between existing users as competing when water is drawn from a hydrologically controllable area.¹⁸

E ho'i ka nani i Moku'ula

West Maui Preservation Association's oral testimony highlighted Maui Komohana's (West Maui) rich cultural history. E ho'i ka nani i Moku'ula (Return the beauty to Moku'ula) is the first in the series of mele (song) first published in Hawaiian newspapers in the 1860's that describes sacred springs, fishponds and Hawaiian royalty at Moku'ula in Lahaina. Moku'ula has been covered up because the water resources were depleted. Designation can be a tool to return to this beauty and carve out a better future by "extolling the past through traditional and customary Native Hawaiian practices."¹⁹ Kūpuna have managed surface and ground water comprehensively without drawing artificial lines and boundaries.

¹⁴ While minutes reflect an MOA, staff have been unable to locate any MOA document in CWRM files.

¹⁵ See Minutes for CWRM Meeting, February 18, 2004, at pages 3-7, <https://files.hawaii.gov/dlnr/cwrmm/minute/2004/mn20040218.pdf>

¹⁶ See Minutes for CWRM Meeting, May 19, 2004, at pages 5-8, <https://files.hawaii.gov/dlnr/cwrmm/minute/2004/mn20040519.pdf>

¹⁷ *Waiāhole I*, 94 Hawai'i at 174, 9 P.3d. at 486.

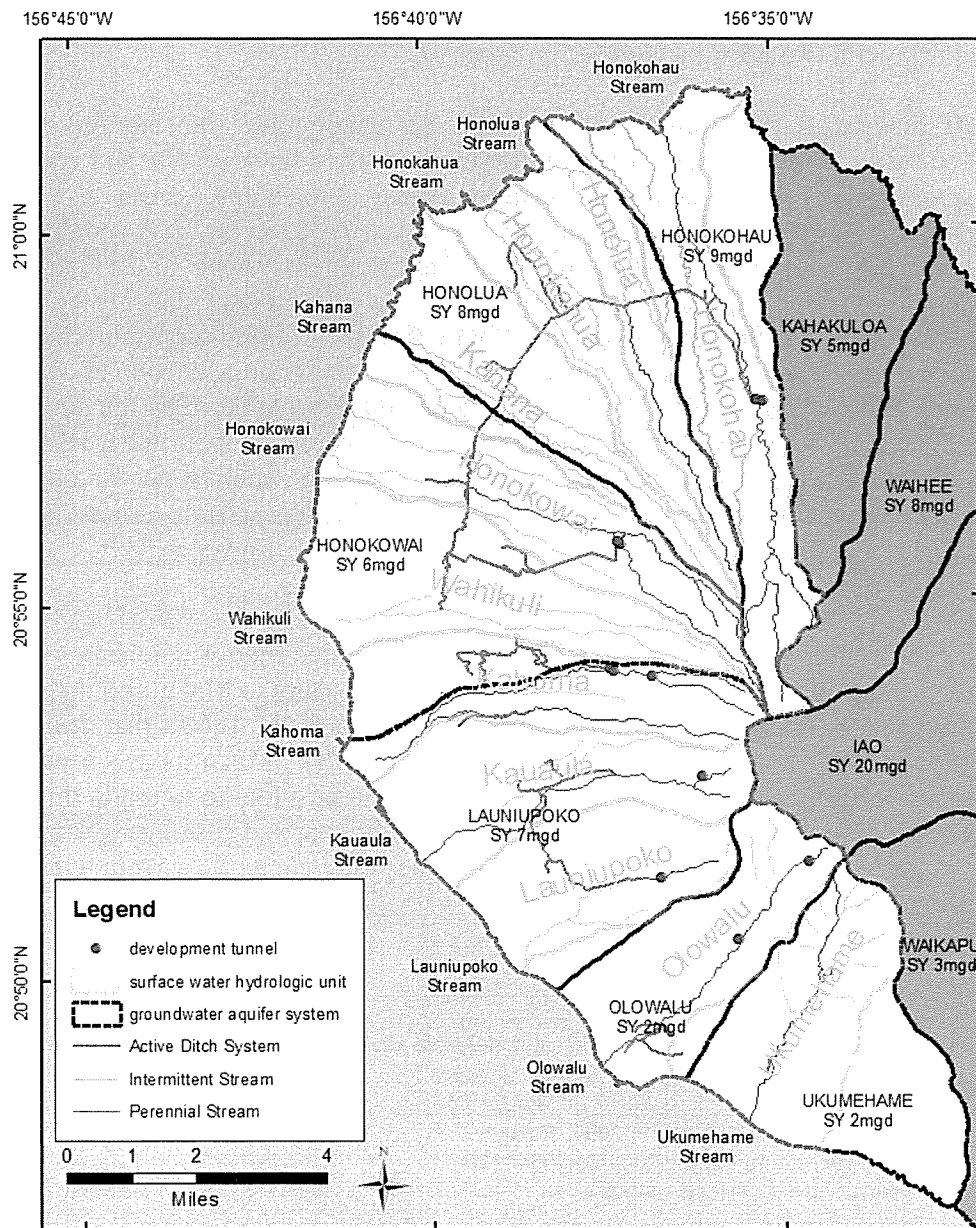
¹⁸ *Id.*

¹⁹ Oral testimony by U'ilani Tanigawa Lum on behalf of the West Maui Preservation Association.

Staff response:

We appreciate sharing of traditional ecological knowledge and lived experiences as a data set. This data will assist the Commission in decision making and helps to ensure that the Commission is meeting its duty of protecting traditional and customary Native Hawaiian rights under the State Constitution and HRS § 174C-101 “Native Hawaiian water rights”.

Figure 2. Ground water Aquifer Systems Areas and their sustainable yields (SY) for the Lahaina Aquifer Sector with overlaying surface water hydrologic units and their perennial and intermittent streams with development tunnels and active irrigation ditch systems.



SUMMARY OF JUSTIFICATION:

Commission staff and the Chairperson have reasonably determined, after conducting scientific investigations and research, that the ground and surface water resources in the Lahaina Aquifer Sector Area may be threatened by existing or proposed withdrawals or diversions of water. There is harm to ground water quantity and quality by saltwater intrusion, there's serious historic and ongoing disputes over current and planned uses of water occurring, there's climate uncertainty and potential drought and decline in rainfall and recharge, and there's surface and groundwater interaction and connection that should be managed in an integrated manner.

Therefore, it is recommended the commission designate the area for the purpose of establishing administrative control over the withdrawals and diversions of ground and surface waters in the area to ensure reasonable and beneficial use of the water resources in the public interest.

RECOMMENDATION:

Staff Recommends that the Commission:

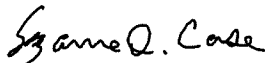
1. Accept Chairperson's Recommendation to Designate the Lahaina Aquifer Sector, Maui as a Surface Water and Ground Water Management Area under HRS Section 174C-41, and
2. To Notice and Hold a Public Hearing

Ola i ka wai,



M. KALEO MANUEL
Deputy Director

APPROVED FOR SUBMITTAL:



SUZANNE D. CASE
Chairperson

Exhibits: 1. January 18, 2022 Staff Submittal on Agenda item A2



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

STAFF SUBMITTAL

COMMISSION ON WATER RESOURCE MANAGEMENT

Honolulu, O'ahu

Designation of Lahaina Aquifer Sector, Maui as a Surface Water and Ground Water Management Area

SUMMARY OF REQUEST:

No Action; The purposes of this submittal are to (1) share information with the Commission on the Chair's decision to initiate proceedings to designate the entire Lahaina Aquifer Sector, Maui as both a Surface Water and Ground Water Management Area based on threats to water resources as identified from factual data presented below; and (2) provide responses received to date from consultation with the Maui County Council, Maui Mayor, and Maui Board of Water Supply (Hawai'i Revised Statutes § 174C-41 (b)).

SUMMARY OF JUSTIFICATION:

Harm to Ground Water Quantity and Quality by Saltwater Intrusion

Current and authorized planned uses of the Honokōwai and Launiupoko aquifer systems either exceed or approach 90% of sustainable yields and threaten the aquifer due to saltwater intrusion of the freshwater lens. Maui County Department of Water Supply projects a 67% increase in potable water consumption in the Lahaina District by 2035, from 10.819 million gallons per day (mgd) in 2020 to 15.554 mgd, based on population growth and community planned development timelines.¹ This demand is currently being met with a mixture of surface water and ground water, which is likely to continue.

Serious Historic and Ongoing Disputes over Current and Planned Uses are Occurring

The use of water for non-public trust purposes is affecting the availability of water to meet public trust needs. Instream values, including water needed to support traditional and customary practices, domestic water uses, recreational uses, and native aquatic biota, have historically, currently, and will continue to be harmed if the Commission does not consider additional protective actions.

Climate Uncertainty – Drought and Decline in Rainfall

Rainfall has declined significantly across the Lahaina District, particularly during the dry season.² Anticipated declines in rainfall based on future projections will negatively affect ground water recharge and streamflow,³ reducing the water availability.⁴

¹ Maui County Water Use and Development Plan ("WUDP"). 2017 Draft.

² Frazier, A.G., and T.W. Giambelluca. 2017. Spatial trend analysis of Hawaiian rainfall from 1920 to 2012. *International Journal of Climatology*, 37(5): 2522-2531.

³ Elison Timm, O., *et al.* 2015. Statistical downscaling of rainfall changes in Hawai'i based on the CMIP5 global model projections. *Journal of Geophysical Research: Atmospheres*, 120(1): 92-112.

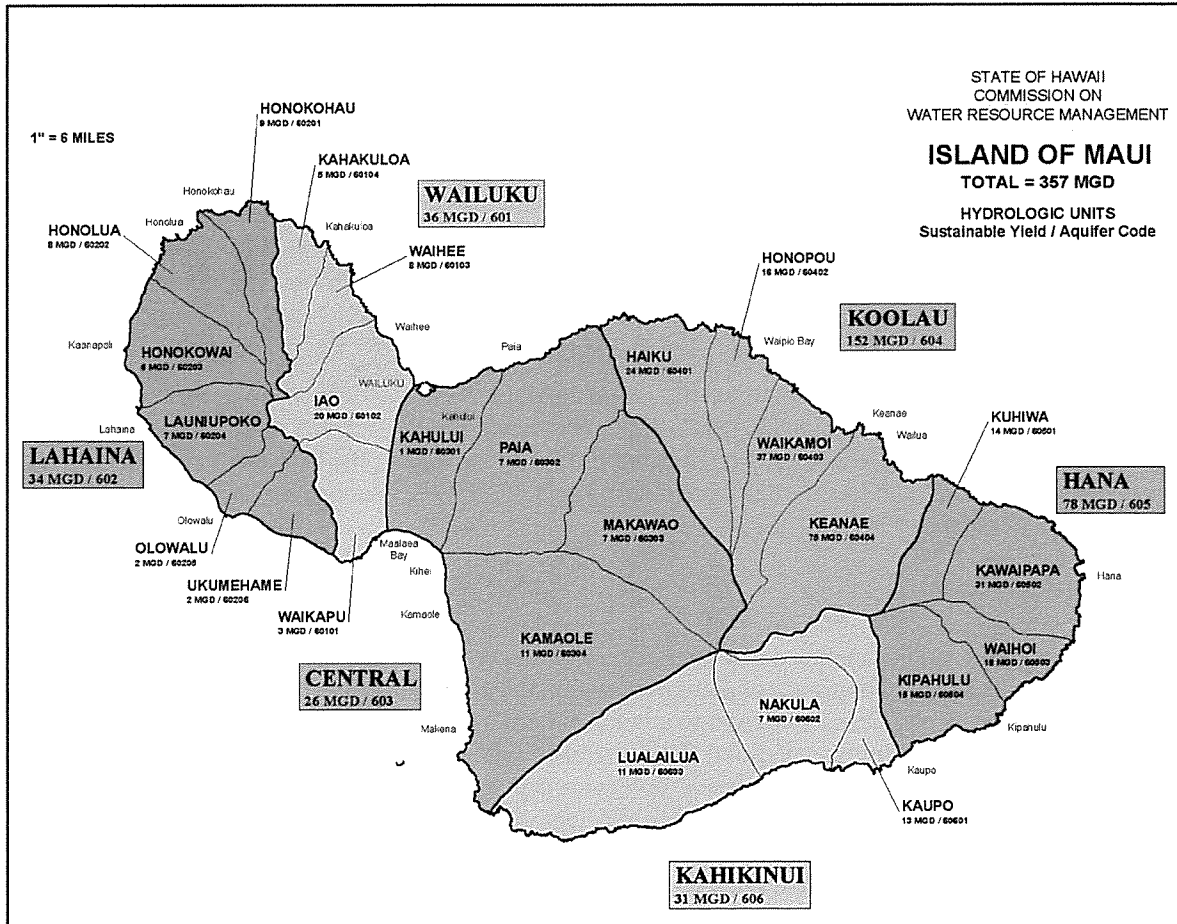
⁴ Mair, A. *et al.* 2019. Estimated groundwater recharge from a water-budget model incorporating selected climate projections, Island of Maui, Hawai'i. USGS SIR 2019-5064.

Enhanced Management and Protection Through Integration of Surface and Ground Water Uses

Water use in the Lahaina Aquifer Sector (see Figure 1) and its associated surface water hydrologic units (see Figure 2) (referred to hereafter as the Lahaina District) is reliant on a combination of surface water diversions and ground water wells. Throughout the Lahaina District, there is an inextricable relationship between surface water and ground water, both in their source and in their use, such that reductions in the availability of one, affects the use and availability of the other. As interim instream flow standards are implemented, the availability of surface water to meet the non-potable needs of the Lahaina District has declined, resulting in the construction of new wells to meet non-potable demand. However, such usage may threaten public trust uses including the domestic needs supplied by existing wells and the needs of the Department of Hawaiian Home Lands in these same aquifers. Water Management Area designation will ensure that the Commission can regulate and manage surface water and ground water in an integrated manner to protect water resources in the Lahaina District.

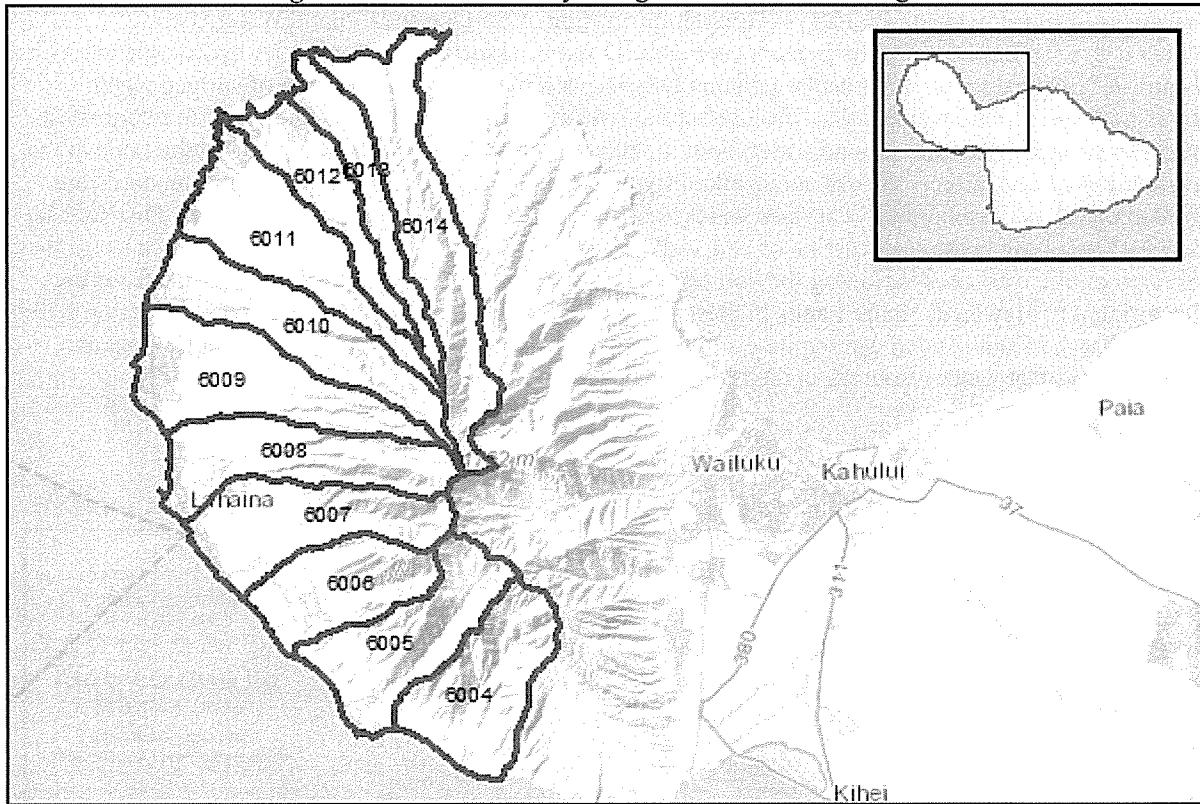
LOCATION MAP:

Figure 1: Lahaina Aquifer Sector highlighted in blue - Ground Water Hydrologic Units, Island of Maui



06/20/2018

Figure 2: Surface Water Hydrologic Units in Lahaina Region



BACKGROUND:

The Lahaina Aquifer Sector is one of six on the island of Maui. It consists of six ground water hydrologic units: Honokōhau, Honolua, Honokowai, Launiupoko, Olowalu, and Ukumehame (Figure 1) and 11 surface water hydrologic units: Honokōhau (6014), Honolua (6013), Honokahua (6012), Kahana (6011), Honokōwai (6010), Wahikuli (6009), Kahoma (6008), Kaua’ula (6007), Launiupoko (6006), Olowalu (6005), and Ukumehame (6004) (Figure 2).

BACKGROUND GEOLOGY:

The West Maui Volcano is composed of a central caldera and two main rift zones trending northwest and southeast from the caldera. Thousands of dikes exist within the rift zone with the number increasing toward the caldera and with depth. Dikes also exist in a radial pattern around the caldera⁵. Most rocks in West Maui originated as shield building Wailuku Basalt overlain with post-shield Honolua Volcanics. In some locations, a late rejuvenation phase of Lahaina Volcanics is present. Wedges of sedimentary deposits are found in stream valleys and along the coasts. Sedimentary deposits have relatively low permeability compared to volcanic rocks and their subsurface extent influences the hydraulic gradient of dike-free volcanic rocks. The permeability of the subaerial, shield-building, and dike-free lava flows in West Maui is high and influenced by: 1) clinker zones associated with ‘a’ā flows; 2) voids along the contacts between lava flows; 3) cooling joints normal to flow surfaces; and 4) lava tubes associated with pāhoehoe flows. The regional horizontal hydraulic conductivity of the dike-free volcanic rocks ranges from hundreds to

⁵ Gingerich, S.B., and Engott, J.A. 2012. Groundwater availability in the Lahaina District, West Maui, Hawai‘i. U.S. Geological Survey Scientific Investigations Report 2012-5010.

thousands of feet per day⁶. Because of the high permeability of these rocks, the horizontal water-table gradients are small (around one foot per mile), with the horizontal permeability as much as 10-100 times the vertical permeability. For large areas of the Lahaina Aquifer Sector, the dike-free basal aquifer is not interrupted by geologic anomalies, resulting in a homogenous region across the Launiupoko, Olowalu, and Ukumehame aquifer systems (Figure 3). Similarly, the dike-free regions of the Honokōwai, Honolua, and Honokōhau aquifer systems are also relatively homogenous, with similar hydraulic conductivities.

CURRENT CONDITIONS: SURFACE WATER

Natural stream flow is declining in perennial streams throughout the Lahaina District due to declines in rainfall, ground water recharge, and subsequently, the baseflow contribution to streams.^{7,8} Current estimates of median and low-flow conditions are based on limited data for the 1984-2013 climate period.⁹ Additional declines in rainfall since then have reduced the availability of streamflow. Projected declines in seasonal and annual rainfall throughout West Maui will continue to negatively affect surface water resources and the instream values they support.¹⁰

Conflicts among water users, stakeholders, and the protection of instream values have persisted for generations. In 2018, the Commission amended interim instream flow standards for six perennial streams in the Lahaina District (Table 1). However, subsequent reductions in the availability of water to meet off-stream demand continue to strain existing water uses, including kuleana tenants and traditional and customary practitioners, and have led to additional conflicts. Currently, a docket is before the Public Utilities Commission (“PUC”) on Launiupoko Irrigation Company, Inc’s (“LIC”) request for a general rate increase for its delivery of stream water from Launiupoko and Kaua‘ula stream and pumping of existing and new ground water sources in the Launiupoko aquifer.¹¹ This docket concerns the IIFS for Kaua‘ula stream, curtailments of water deliveries, including kuleana tenants who are dependent on the LIC system, effects on traditional and customary Native Hawaiian practices, and the new use of a former plantation skimming well shaft. In December 2021, CWRM staff participated in a stakeholder meeting and provided public comments to the PUC. (See Exhibit 1)

A number of informal (e.g., phone calls, letters, emails) and five formal complaints have been filed with the Commission regarding the lack of streamflow, the waste of diverted surface water, the delivery of water, and issues with diversion management from Honokōhau, Honokōwai, Kahoma, Kanahā, Kaua‘ula, Launiupoko, Olowalu, and Ukumehame since 2018. In 2020 alone, Commission staff have fielded complaints for Honokōhau, Kahoma, Kanahā, Kaua‘ula, and Ukumehame streams. The latest is a waste complaint filed for Kaua‘ula Stream on December 9, 2021 alleging leakages of water at multiple locations of LIC’s system and a reduction of water delivered for kalo cultivation from the needed 90,000 gpd to between 47,000-52,000 gpd. The complaints ask the commission to order repairs and delivery of water through the traditional Pi‘ilani ‘auwai. CWRM staff will be forwarding complaint for formal response to LIC and anticipate future recommendations to come before the Commission for action.

⁶ Rotzoll, K., El-Kadi, A.I., and Gingerich, S.B. 2007. Estimating hydraulic properties of volcanic aquifers using constant-rate and variable-rate aquifer tests. *Journal of the American Water Resources Association*, 43(2): 334-345.

⁷ Frazier, A.G., and T.W. Giambelluca 2017. *Id.*

⁸ Gingerich, S.B., and Engott, J.A. 2012. *Id.*

⁹ Cheng, C.L. 2014. Low-flow characteristics of streams in the Lahaina District, West Maui, Hawai‘i. U.S. Geological Survey Scientific Investigations Report, 2014-5087.

¹⁰ Elison Timm, O., *et al.* 2015. *Id.*

¹¹ PUC Docket No. 2020-0089. See <https://dms.puc.hawaii.gov/dms/dockets?action=search>

Figure 3. Distribution of regional aquifer hydraulic conductivity in central and West Maui, Hawai'i (Gingerich and Engott, 2012)

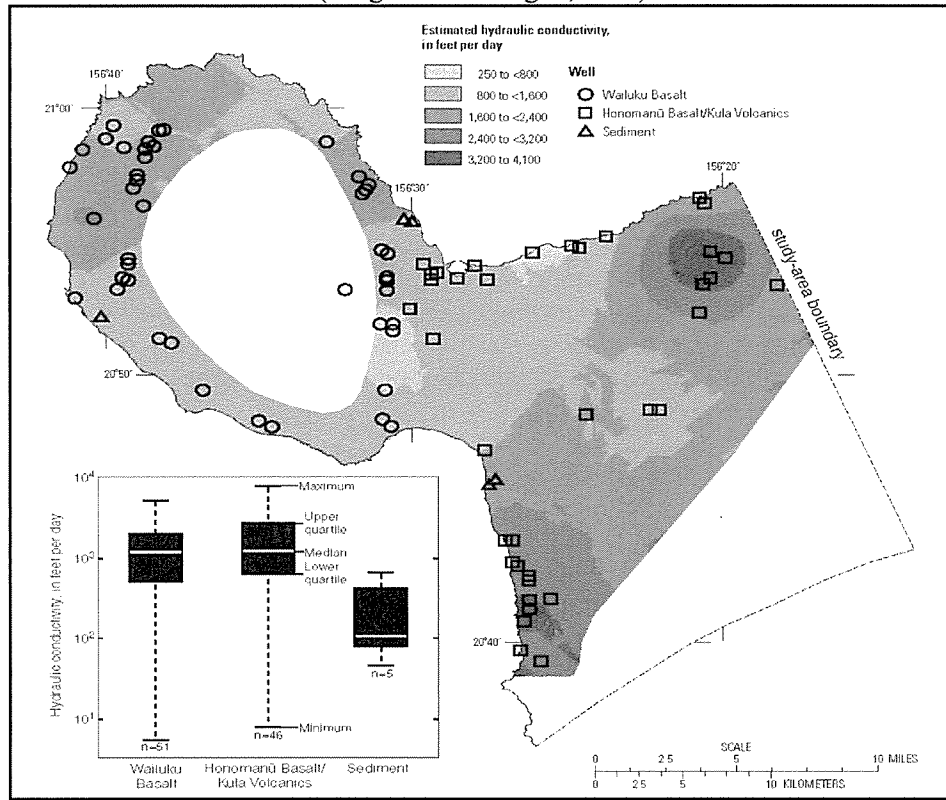


Table 1. Existing interim IFS for surface water hydrologic units in the Lahaina Aquifer Sector. [n/a = not applicable]

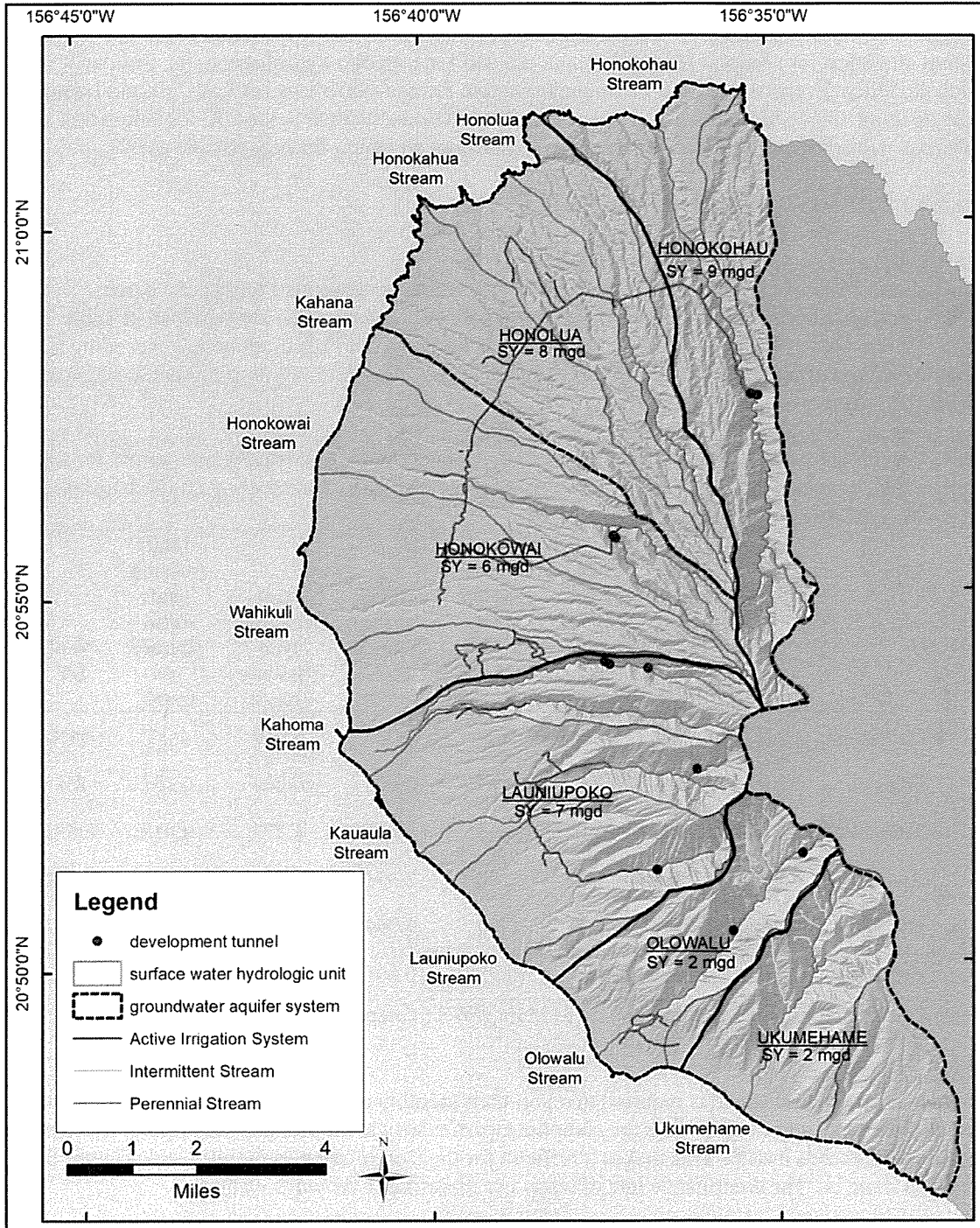
surface water hydrologic unit	stream name	Q ₅₀ (mgd)	Q ₉₀ (mgd)	interim IFS (mgd)	interim IFS elevation (ft)	estimated flow available for non-instream use at Q ₅₀ (mgd)
Honokōhau	Honokōhau	19.4	11.0	8.6	340	12.2 ¹
Honolua	Honolua	2.46	0.00	natural flow	750	0.0
Honokōwai	Amalu ²	--	--	n/a	1600	0.0
Honokōwai	Kapaloa	--	--	n/a	1560	n/a
Honokōwai	Honokōwai	3.49	2.32	n/a	1480	n/a
Kahoma	Kahoma	3.75	1.87	3.49	2100	0.26
Kahoma	Kanahā	3.17	2.65	0.50	1100	2.67
Kaua'ula	Kaua'ula	6.14	3.36	3.36	1540	2.78
Launiupoko	Launiupoko	0.30	0.23	0.00	1340	0.30
Olowalu	Olowalu	3.23	2.20	2.65	130	0.58
Ukumehame	Ukumehame	3.23	2.07	2.90	220	0.33

¹amount reflects downstream location of interim IFS and groundwater gains between intake and interim IFS

²intake sealed by rockfall during 2018 storm and is no longer functional

In May 2021, the Commission approved the Department of Hawaiian Home Lands' (DHHL) reservation of 2 mgd of surface water to meet their foreseeable future non-potable water needs in Honokōwai serviced by the Honokōhau Ditch from the Honokōhau Stream. Commission action to modify Maui Land and Pineapple's intake also reduced the peak flow available to the ditch to approximately 20 mgd, which partially addressed a formal waste complaint received in 2019.

Figure 4. Ground water Aquifer Systems Areas and their sustainable yields (SY) for the Lahaina Aquifer Sector with overlaying surface water hydrologic units and their perennial and intermittent streams with development tunnels and active irrigation ditch systems.



Ditch Systems

The Lahaina Aquifer Sector has eight water collection systems (see Figure 4) with the Honokōhau ditch being the largest. Honokōhau ditch diverts stream and development tunnel water at the 825-foot elevation in Honokōhau Valley and transports it across six surface water hydrologic units and three aquifer systems to meet potable and non-potable needs. The Honokōwai Ditch diverts stream and development tunnel water at the 1560-foot elevation in Honokōwai Gulch for non-potable uses in the Honokōwai and Wahikuli hydrologic units. The Kahoma Ditch diverts surface and development tunnel water from Kahoma Stream at the 1920-foot elevation for non-potable use in the Kahoma hydrologic unit. Kanahā pipeline diverts water from Kanahā Stream at the 1120-foot elevation for potable and non-potable use also in the Kahoma hydrologic unit. Kaua‘ula Ditch diverts surface and development tunnel water from Kaua‘ula Valley at the 1540-foot elevation for non-potable use in Kaua‘ula and Launiupoko hydrologic units. Similarly, Launiupoko Ditch diverts water from Launiupoko Stream for non-potable use in Kaua‘ula and Launiupoko hydrologic units. Olowalu Stream is diverted at the lower Olowalu Ditch at the 200-foot elevation for non-potable uses. Ukumehame Stream is diverted at the 240-foot elevation for non-potable uses.

CURRENT CONDITIONS: GROUND WATER

Water Withdrawals

Current 12-month moving average ground water withdrawals, development tunnel discharge, entitled/authorized planned use, other permitted well capacity and their totals are provided in Table 2 for the Aquifer System Areas in the Lahaina Aquifer Sector. Honokōwai and Launiupoko are exceeding SY. The grey column of maximum reported pumpage is to show the highest rate of pumping that has historically occurred.

Table 2. Current (November 2021) 12-month moving average (MAV) reported pumpage and for aquifer systems in the Lahaina Aquifer Sector. development tunnel discharge and existing entitled/authorized planned use [million gallons per day, mgd]

System	SY (mgd)	2020 12- month average (mgd)	2021 12- month average (mgd)	develop ment tunnel discharg e (mgd)	entitled/ auth. planned use* (mgd)	other permitted well capacity (mgd)	total existing and auth. planned use (mgd)	% of SY
Ukumehame	2.0	0.042	0.030	0.00	1.080	0.000	1.11	56%
Olowalu	2.0	0.082	0.064	0.10	0.003	0.000	0.167	8%
Launiupoko	7.0	1.637	1.305	3.91	1.036	1.777	8.028	115%
Honokōwai	6.0	3.480	3.998	2.50	2.533	1.150	10.181	170%
Honolua	8.0	2.131	2.554	0.00	1.969	1.150	5.673	71%
Honokōhau	9.0	0.000	0.000	3.75	0.001	0.000	3.751	42%

*based on email and excel table from County of Maui DWS September 3, 2020

Water Use Reporting

The owner or operator of a well is required to report their monthly water use to the Commission whether it is used or not. However not all owners are compliant, particularly in the Honokōwai Aquifer System Area, which already exceeds its SY. This makes it difficult for the Commission to monitor and account for how much water there is. The compliance rate of water use reporting is shown in Table 3.

Table 3. Water Use Reporting by Aquifer System Area

Aquifer System Area	Total # of Wells (including OBS and UNU)	# Wells Reporting Water Use	Compliance Rate
Ukumehame	5	1	20%
Olowalu	5	4	80%
Launiupoko	31	22	71%
Honokōwai	42	28	67%
Honolua	16	11	69%
Honokōhau	4	0	0%

For the most part, Commission staff understand the current status of most wells, whether they are pumping, not in use, or are lost. There are a few wells in which we don't know their status and have ignored our outreach program. These include two in the Honokōhau Aquifer System, one in the Honokōwai Aquifer System, and one in the Launiupoko Aquifer System. There are a number of old test holes listed as observation wells, eight in the Honokowai Aquifer System and four in the Launiupoko Aquifer System, that staff need to verify their existence and could be potentially utilized in our network of monitoring wells on island. In addition, staff need to visit an old shaft and two DLNR wells in the Honolua Aquifer System to verify their current condition.

Maximum Permitted Well Capacity

The maximum permitted well capacity describes the amount of water that the well is capable of pumping in a day. Most domestic well users only pump water for a limited amount of time per day until their need is met. The Maui County DWS wells are pumping for many hours a day and are closer to reaching their maximum pump capacity, especially in times of drought and higher water demand. Maximum permitted pump capacity is an important data set to estimate potential water uses when wells are not reporting. Some of the large capacities identified include all of the former sugar skimming wells, most of which are now unused (Table 4).

Table 4. Maximum Permitted Pump Capacity by Aquifer System Area

Aquifer System Area	Maximum Pump Capacity (mgd)	SY (mgd)
Ukumehame	4.954	2
Olowalu	8.553	2
Launiupoko	42.302	7
Honokōwai	43.369	6
Honolua	7.752	8
Honokōhau	0.012	9

Saltwater Intrusion and Chloride Levels

Hawai'i's public trust describes the "authority and duty to maintain the purity and flow of Hawai'i's waters for future generations."¹² A degradation of ground water resources that may compromise existing or future beneficial uses shall not be allowed or permitted.¹³ Many wells in the Lahaina Aquifer Sector have become brackish and are already exceeding the chloride concentration of greater than 250 milligrams per liter (mg/L

¹² *In Re Water Use Permit Applications*, 94 Hawai'i 97, 138 (2000) ("*Waiāhole I*").

¹³ The Department of Health assesses degradation of ground water quality only pertaining to organic and inorganic contaminants pursuant to HAR Chapter 11-20 and HRS § 174C-44 (2), the Commission assesses saltwater intrusion and chloride levels pursuant to HRS § 174C-44 (4) and (5).

or part per million – ppm) that is considered unacceptable for drinking purposes under the EPA Secondary Drinking Water Standards.¹⁴ The county water departments generally limit chloride levels of water within their municipal system to less than 160 mg/L. The public trust and the precautionary principle require the Commission to limit the use of brackish water and wells to prevent further salination. This will lead to less available non-potable water sources.

In addition to monthly reports of water use, the Commission may require salinity and water level reporting as may be deemed appropriate. Currently, only seven County wells in Honolulu, seven Hawai'i Water Service wells in Honokōwai, and five County wells in Launiupoko report chlorides monthly to the Commission.

Mahinahina Deep Monitoring Well (“DMW”) (6-5739-003)

Beginning in 2001, CWRM staff has monitored on a quarterly basis, the Mahinahina DMW (6-5739-003) located approximately two miles inland and 1.4 miles southeast of the Kā'anapali Airport, in the Honokōwai Aquifer System Area. Figure 5 illustrates the most recent Conductivity, Temperature, and Depth (“CTD”) profile measured in this well on November 18, 2021. The profile shows a typical basal aquifer lens, with fresh water overlying a brackish water transition zone, which in turn, overlies the brackish/sea water interface.

Figure 6 presents a time series chart illustrating the trends of the measured Top of Transition Zone (“TTZ” at 1,000 $\mu\text{S}/\text{cm}$), mid-point of Transition Zone (“MPTZ” at 25,000 $\mu\text{S}/\text{cm}$), and brackish/sea water interface (50,000 $\mu\text{S}/\text{cm}$) during the period of monitoring. The time series shows the measured fresh water/ brackish water interface (TTZ) has been stable since 2013. The time series shows a slow rise in the MPTZ, near the calculated Gyben Herzberg elevation of 128 feet below mean sea level (msl). Additionally, the sea water interface has remained relatively stable at \pm 170 feet below msl.

The trends illustrated show that the water level in this DMW has risen nearly 0.5 feet, while the TTZ has declined 1.27 feet, indicating a thickening of the freshwater lens. The gentle rise of the Mid-Point (MPTZ) to near the calculated Mid-Point, based upon the water level, and the stability of the brackish/sea water interface, also indicates this area of the Honokowai ASA has been stable over the period of monitoring.

Note: the TTZ measured prior to 2006 may be considered suspect and is included on this figure for comparative purposes (stability over the period of monitoring, 2001-2006). The CTD instrument used to collect profile data prior to 2007 had a suspected calibration issue in the 1,000 $\mu\text{S}/\text{cm}$ range and was replaced in 2008 by the instrument currently used to collect CTD data (calibrated annually).

¹⁴ See <https://www.epa.gov/sdwa/secondary-drinking-water-standards-guidance-nuisance-chemicals>

Figure 5. Conductivity, Temperature, and Depth (CTD) profile November 18, 2021

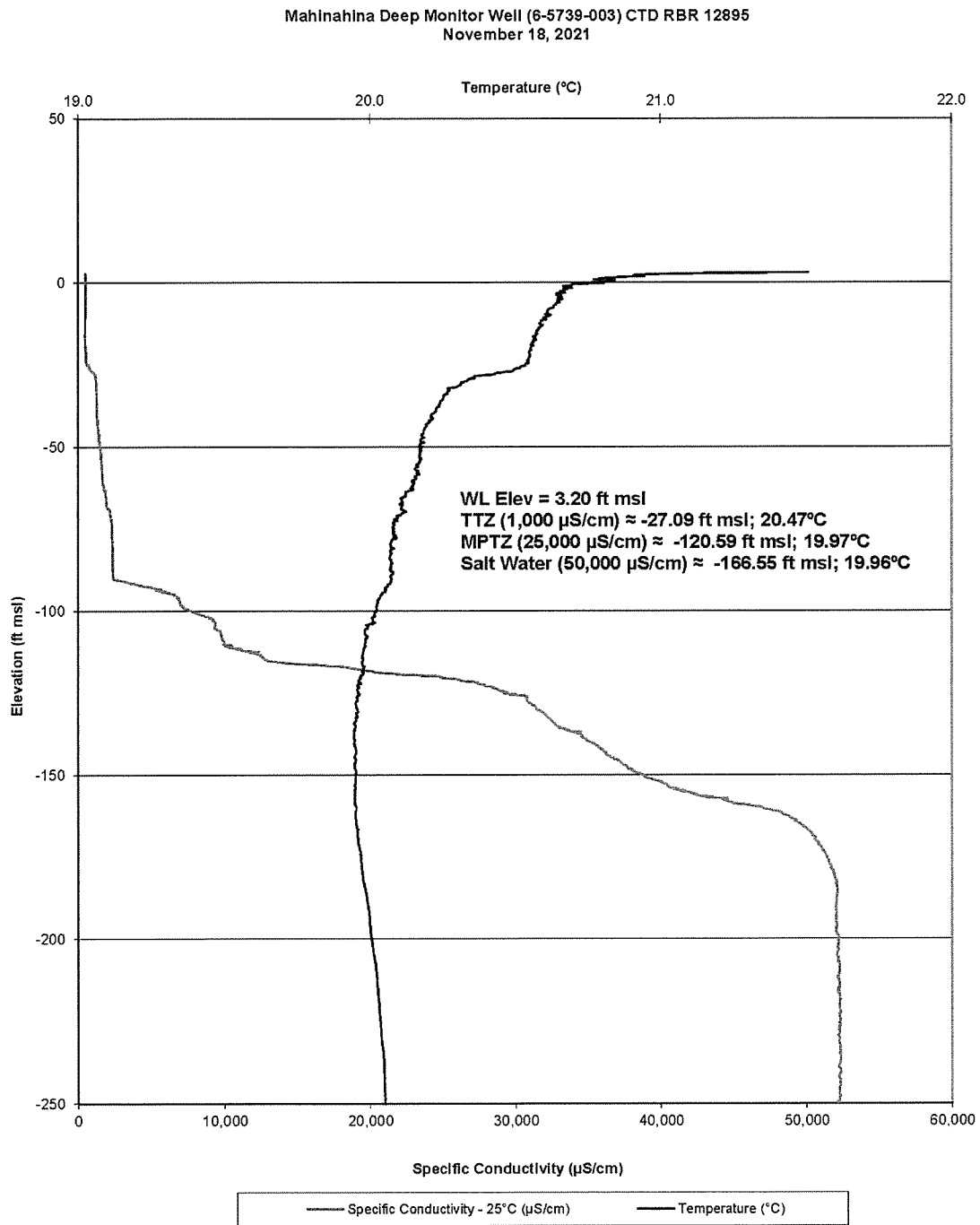
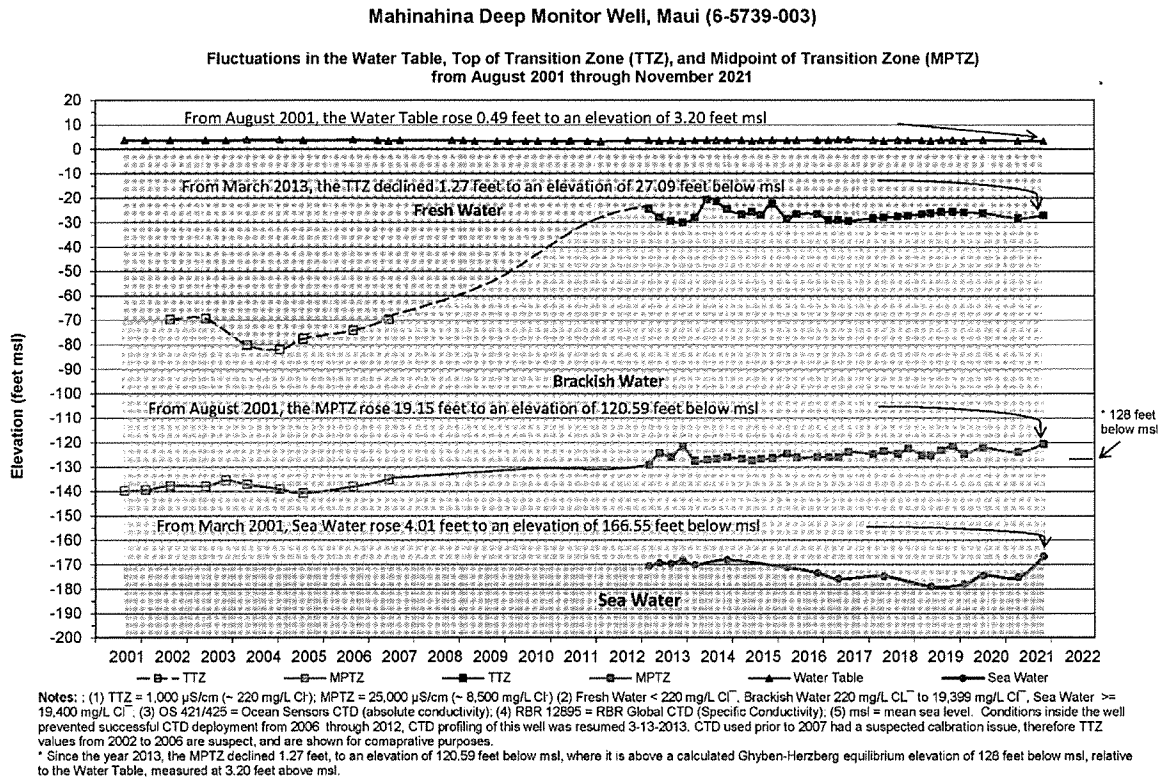


Figure 6. Time Series Chart of Water Trends from 2001-Present



last updated 1/13/2022

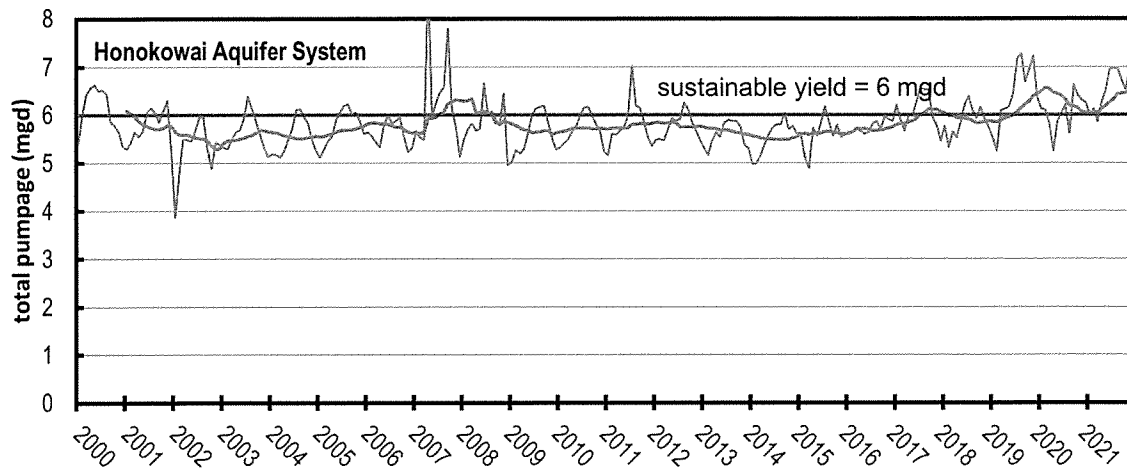
Honokōwai Aquifer

The sustainable yield of the Honokōwai Aquifer System Area is 6.0 mgd. As of November 2021, the average withdrawals of ground water from the Honokōwai Aquifer System Area are 3.998 mgd, a 10% increase from August 2020 (3.626 mgd), with a maximum historic monthly pumping rate of 4.778 mgd. These values do not consider the withdrawal of approximately 2.5 mgd of ground water from development tunnels. In addition, DHHL has an approved water reservation of 770,000 gpd from the Honokōwai Aquifer System Area that is included in the authorized planned use total of 2.533 mgd that counts against sustainable yield. Reported total ground water withdrawals and 12-month moving average (12-MAV) for the Honokōwai Aquifer System Area are provided in Figure 7.

There is lower hydraulic conductivity in the coastal alluvium and weathered basalt relative to the north-south conductivity of the basalt aquifer system that connects the Honokōwai Aquifer System to the neighboring Honolua and Honokōhau Aquifer System Areas¹⁵. Therefore, withdrawals from Honokōwai in the dike-free basal aquifer will most likely affect the neighboring aquifers.

¹⁵ Glenn, Craig R., Robert B. Whittier, Meghan L. Dailer, Henrieta Dulaiova, Aly I. El-Kadi, Joseph Fackrell, Jacque L. Kelly, Christine A. Waters, Jeff Sevadjan. 2013. "Lahaina Groundwater Tracer Study – Lahaina, Maui, Hawaii." *Final Report prepared from the State of Hawaii Department of Health, the U.S. Environmental Protection Agency, and the U.S. Army Engineer Research and Development Center.*

Figure 7. Current monthly pumpage (blue line) and 12-month moving average (green line) from the Honokowai Aquifer System, including ground water development tunnel discharge, in million gallons per day (mgd).



Launiupoko Aquifer

The sustainable yield of the Launiupoko Aquifer System Area is 7.0 mgd. As of November 2021, the average withdrawals of ground water from the Launiupoko Aquifer System Area are 1.305 mgd, a 20% decrease from August 2020 (1.637 mgd) with a maximum historic monthly pumping rate of 2.638 mgd. These values do not consider the withdrawal of approximately 4.01 mgd of ground water from development tunnels as well as current pending well applications whose combined proposed daily uses of 1.200 mgd with a combined pump capacity 1.777 mgd are referenced in Table 5.

There is a proposed LIC-2 well (State Well No. 6-5138-005) that is planned to have a 500 gallon per minute pump installed, for a total proposed use of 0.700 mgd for agricultural purposes. This well has not yet been permitted and thus not included in the maximum pumped capacity above. There are also the currently unused Lahaina Shaft-Pump A (State Well No. 6-5240-003) and Lahaina Shaft-Pump B (State Well No. 6-5240-002). Pump A has had a 7,000 gpm pump installed (maximum capacity of 10 million gallons per day) since 1942 and Pump B had a 1,400 gpm pump installed (maximum capacity of 2 million gallons per day), also since 1942. Recently, the well owner installed a 700 gpm pump in Pump A, which would have a maximum daily production of 1 million gallons per day. Acceptance of this pump is pending a pump test and staff analysis that there are no adverse impacts to the environment and other existing water users. It is staff's understanding that a replacement would be requested for Pump B, but it is not known at this time how much quantity will be requested to be withdrawn in total for the Lahaina Shaft Pumps A & B, and whether or not they would be run at the same time.

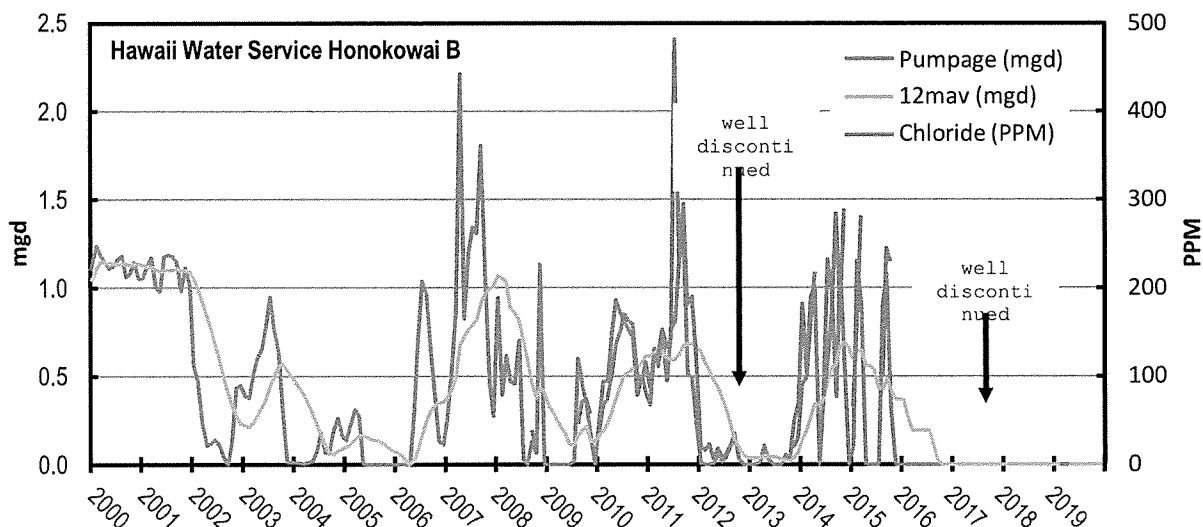
Similar to the Honokōwai system, there is lower hydraulic conductivity in the coastal alluvium and weathered basalt relative to the north-south conductivity of the basalt aquifer system that connects the Launiupoko Aquifer System to the neighboring Honokōwai and Olowalu Aquifer System Areas. Depending on well location and withdrawal rate, withdrawals from Launiupoko in the dike-free basal aquifer may affect the neighboring aquifers.

Table 5. Current (2018-2020) well applications pending completion in the Lahaina Aquifer Sector.

Aquifer System	Well Name	Well Number	Proposed Pump Capacity (mgd)	Proposed Daily Amount (mgd)
Launiupoko	Jackson Rancheria	6-5037-001	0.187	0.075
Launiupoko	Maria Lynn Moyer Memorial	6-5137-002	0.006	0.005
Launiupoko	Makila Kai	6-5138-002	0.504	0.150
Launiupoko	Rogers	6-5139-004	--	--
Launiupoko	Kui'a Estate	6-5239-001	0.360	0.270
Launiupoko	LIC 1B	6-5139-005	0.720	0.700
total			1.777	1.200

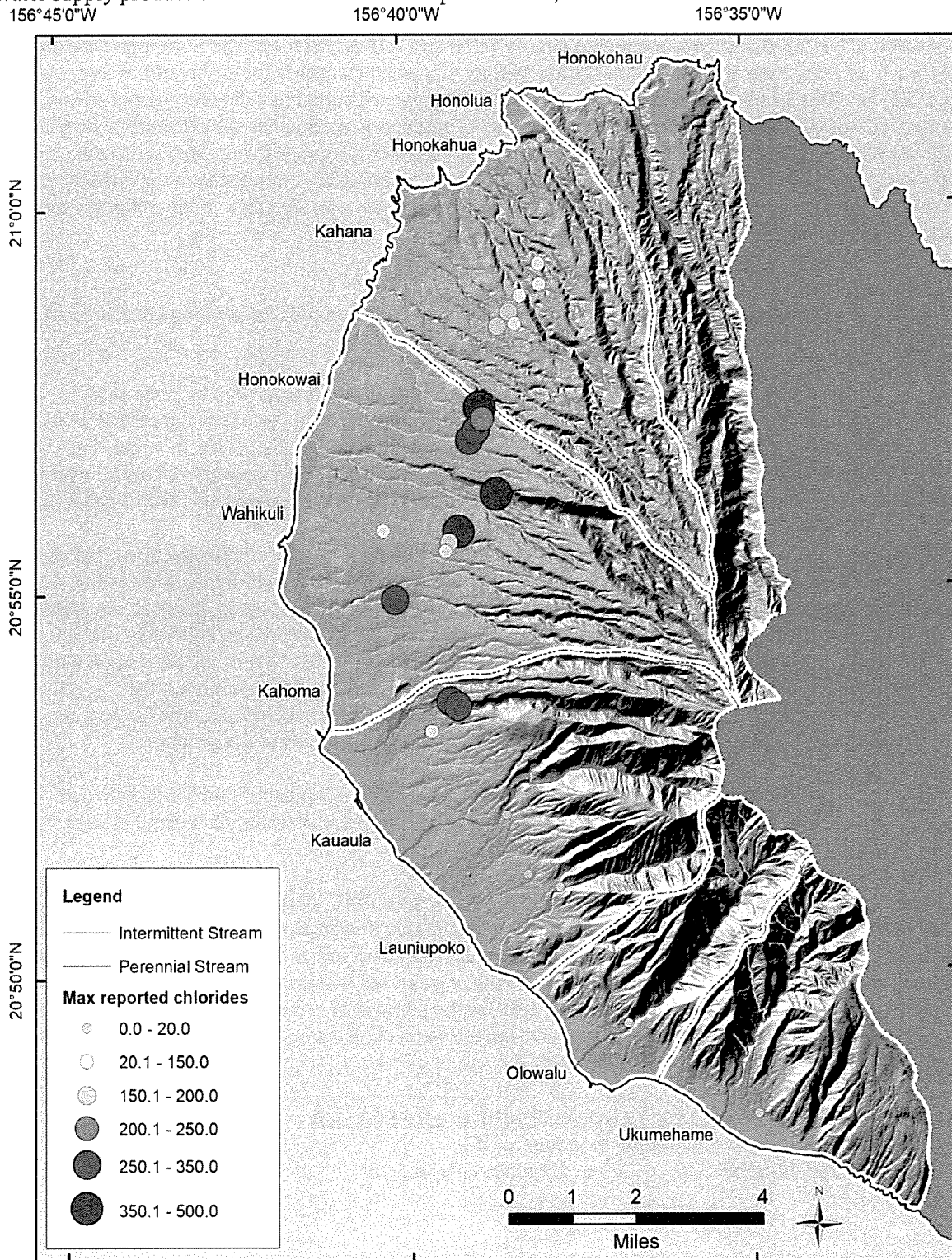
As ground water resources reach or exceed maximum withdrawal rates in the Honokōwai and Launiupoko Aquifer System Areas, ground water development will need to shift to other adjacent aquifers to avoid harm in overpumping and upconing. In addition, existing wells in the Lahaina Aquifer Sector have been discontinued or cannot be continuously pumped because of increasing chlorides as evident in Figure 8.

Figure 8. Monthly pumpage (mgd), 12-month moving average (12MAV) and chloride (ppm) for Honokōwai B (5638-003), operated by Hawaii Water Service, West Maui.



The majority of the large capacity production wells which supply the potable water needs of the Lahaina District have reported maximum chloride content exceeding the EPA standard for drinking water supply (Figure 9). For this reason, Maui County Department of Water Supply is reliant on a combination of ground water and surface water sources to reduce the salinization of the aquifer. Water Management Areas can ensure proper well spacing and limit withdrawals to avoid impacts to water quality.

Figure 9. Maximum reported chloride content (parts per million, ppm) between 2010-2020 for potable water supply production wells in the Lahaina Aquifer Sector, Maui



LEGAL AUTHORITY

The Hawai‘i Constitution mandates protection of Hawai‘i’s natural resources, promoting development and use of resources in a manner consistent with conservation and self-sufficiency. The State also “has an obligation to protect, control, and regulate the use of Hawai‘i’s water resources for the benefit of its people.” Article XI, Sections 1 and 7. This constitutional public trust creates a dual mandate of protection and maximum reasonable and beneficial use. The mandate of protection establishes the affirmative duty to ensure the continued availability and existence of Hawai‘i’s water resources for present and future generations. The Commission is the primary guardian of water resources and must take the initiative in considering, protecting, and advancing public rights in the resource at every stage of the planning and decision-making process.¹⁶

State Water Code

Legal requirements for initiating the water management area designation process are found primarily in HRS § 174C-41 et seq. and HAR § 13-171-3 et seq.:

§174C-41 Designation of water management area. (a) When it can be reasonably determined, after conducting scientific investigations and research, that the water resources in an area may be threatened by existing or proposed withdrawals or diversions of water, the commission shall designate the area for the purpose of establishing administrative control over the withdrawals and diversions of ground and surface waters in the area to ensure reasonable-beneficial use of the water resources in the public interest.

(b) The designation of a water management area by the commission may be initiated upon recommendation by the chairperson or by written petition. It shall be the duty of the chairperson to make recommendations when it is desirable or necessary to designate an area and there is factual data for a decision by the commission. The chairperson, after consultation with the appropriate county council, county mayor, and county water board, shall act upon the petition by making a recommendation for or against the proposed designation to the commission within sixty days after receipt of the petition or such additional time as may be reasonably necessary to determine that there is factual data to warrant the proposed designation.

(c) Designated ground water areas established under chapter 177, the Ground-Water Use Act, and remaining in effect on July 1, 1987, shall continue as water management areas. [L 1987, c 45, pt of §2; am L 1999, c 197, §4]

The State Water Code (Hawai‘i Revised Statutes (“HRS”) chapter 174C, part IV, Regulation of Water Use) and supporting administrative rules¹⁷ on water management area designation state the Commission shall designate an area once a reasonable determination is made – based on scientific investigation and research – that water resources in an area are threatened by existing or proposed withdrawals or diversions of water. If determined, the Commission shall designate the area for the purpose of establishing administrative control over the withdrawals and diversions of ground and surface waters in the area to ensure reasonable-beneficial use of the water resources in the public interest.

Factual Data required for Chairperson’s Recommendation to Commission

The Chairperson may initiate the designation process if:

- it is either desirable or necessary to designate an area; and

¹⁶ *Waiāhole I*, at 143.

¹⁷ HAR chapter 13-171, subchapter 2. Designation of Water Management Areas.

- there is factual data for a decision by the Commission.¹⁸

Such factual data may be gathered by investigations. HRS § 174C-43. The Chairperson is further obligated to consult with the appropriate county council, county mayor, and county water board as part of the designation process. HRS §§ 174C-41(b) and 174C-46.

If the Commission accepts the Chairperson's recommendation to designate, the Commission then holds a public hearing in accordance with HRS § 174C-42 and HAR § 13-171-5.

CRITERIA FOR SURFACE WATER DESIGNATION (HRS § 174C-45)

In designating an area for water use regulation, the Commission shall consider the following:

- (1) Whether regulation is necessary to preserve the diminishing surface water supply for future needs, as evidenced by excessively declining surface water levels, not related to rainfall variations, or increasing or proposed diversions of surface waters to levels which may detrimentally affect existing instream uses or prior existing off stream uses;
- (2) Whether the diversions of stream waters are reducing the capacity of the stream to assimilate pollutants to an extent which adversely affects public health or existing instream uses; or
- (3) Serious disputes respecting the use of surface water resources are occurring.

ANALYSIS OF CRITERIA FOR SURFACE WATER DESIGNATION

Chairperson's initiation of designation proceedings is based on Commission staff findings that:

- (1) There is a direct tradeoff between the regulation of diversions and restoration of instream flows and the availability of water to support the off-stream needs of the general public through public and private municipal water systems.
- (2) The non-potable water needs of 2 mgd for current and foreseeable development and use of Hawaiian Home Lands as set forth in section 221 of the Hawaiian Homes Commission Act may be impacted by other off-stream non-potable uses in Kapalua and Kā'anapali.
- (3) While the priority is always given to protecting the four public trust uses of water: (1) water in its natural state; (2) water used for traditional and customary practices; (3) water for domestic uses; (4) water reserved for DHHL, without the designation of a water management area and issuance of water use permits, there are few methods for regulating non-instream uses.
- (4) Designation of a water management area will require analysis and use of alternative water sources for non-potable uses.
- (5) There continues to be serious disputes between instream uses of water and operators of former plantation irrigation systems.

CRITERIA FOR GROUND WATER DESIGNATION (HRS § 174C-44)

In the designation of an area for water use regulation, the Commission shall consider the following:

¹⁸ Unlike when the designation process is initiated by written petition, the Chairperson is not required to act on the petition within 60 days of receipt although additional time as may be reasonably necessary to determine there is factual data is allowed. HRS § 174C-41(b).

- (1) Whether an increase in water use or authorized planned use may cause the maximum rate of withdrawal from the ground water source to reach ninety percent of the sustainable yield;
- (2) There is an actual or threatened water quality degradation as determined by the department of health;
- (3) Whether regulation is necessary to preserve the diminishing ground water supply for future needs, as evidenced by excessively declining ground water levels;
- (4) Whether the rates, times, spatial patterns, or depths of existing withdrawals of ground water are endangering the stability or optimum development of the ground water body due to upconing or encroachment of saltwater;
- (5) Whether the chloride contents of existing wells are increasing to levels which materially reduce the value of their existing uses;
- (6) Whether excessive preventable waste of ground water is occurring;
- (7) Serious disputes respecting the use of ground water resources are occurring; or
- (8) Whether water development projects that have received any federal, state, or county approval may result, in the opinion of the Commission, in one of the above conditions.

ANALYSIS OF CRITERIA FOR GROUND WATER DESIGNATION

Chairperson's initiation of designation proceedings is based on Commission staff findings that:

- (1) There has been an increase in water use as well as an increase in authorized planned use which has caused the maximum rate of withdrawal from the ground water to reach ninety percent of the sustainable yield in the Honokōwai Aquifer System;
- (2) Recent (2018-2020) well construction permits (installed pump capacity of 1.777 mgd) for the Launiupoko Aquifer System Area approved by the Commission are not included in the entitled/authorized planned use as summarized by the Maui DWS Water Use Development Plan and therefore cause the maximum rate of withdrawal from the ground water to exceed the sustainable yield in the Launiupoko Aquifer System Area;
- (3) Based on reporting, certain wells within the Lahaina Aquifer Sector Area, there is an actual or threatened water quality degradation, with chloride content surpassing the 250 ppm maximum for safe drinking water as determined by the US EPA and Department of Health;
- (4) The existing withdrawal of ground water is resulting in an increase in saltwater intrusion and a rise in the top of the transition zone endangering the stability or optimum development of the aquifer;
- (5) The chloride content of some existing wells has increased to levels which have led them to be either discontinued completely or the pumping rate managed to such a degree as to materially reduce the value of their existing use;

DESIGNATION PROCESS

The process to designate a ground water management area is described in HRS § 174C-41 to -46 and

Hawaii Administrative Rules (HAR) § 13-171-3 to -9. The process follows these general steps:

- (1) Recommendation to designate by the Chairperson or by written petition for initiation or continuation of investigation of the situation in the proposed management area; HRS § 174C-41(a).
- (2) Consultation with county council, county mayor, and county water board concerning the recommendation or petition HRS § 174C-41(b).
- (3) Commission action to accept recommendation regarding designation of water management area and to hold public hearing. HRS § 174C-42.
- (4) Notice for and Conduct of Public Hearing. HRS § 174C-42.
- (5) Commission action to accept, deny, or defer recommendation to designate a water management area HRS § 174C-46.

CURRENT STATUS

The Chairperson initiated designation proceedings and began consultation with the County Council, County Mayor, and County Water Board via formal letter dated November 29, 2021 (See Exhibit 2)

The Commission received responses from the County Council dated December 7, 16, and 29, 2021 with clarifying questions requesting data, a request to present to the County Council, and to understand the designation process and timeline. The Commission responded with letter dated December 17, 2021 (See Exhibit 3).

The Commission received a response from Maui DWS dated December 28, 2021 (See Exhibit 4) providing preliminary comments that are summarized below with staff's response:

1. How is tunnel discharge accounted for in relation to sustainable yield?
 - “Ground water means any water found beneath the surface of the earth, whether in perched supply, dike-confined, flowing, or percolating in underground channels or streams, under artesian pressure or not, or otherwise.” HRS § 174C-3. Tunnels in Honokōwai and Launiupoko tap into high level ground water that would otherwise discharge naturally as spring sources or discharge into the basal lens. As such, these tunnels, as developed sources of ground water, are counted against sustainable yield.
2. Do not support designation for entire aquifer sector because some aquifer systems included in this initiative have no basis for designation as set forth in the State Water Code. Honokōwai aquifer may exceed sustainable yield and support investigations to consider designation of Honokōwai Aquifer System only.
 - Given the uncertainty of rainfall recharge due to the climate crisis, the Commission is recommending to proactively designate both ground and surface water management areas based on the data and analysis presented above and following the precautionary principle. Precautionary Principle: The Commission’s duties under the constitution and Code embody the precautionary principle, which holds that scientific uncertainty should not be a basis for postponing effective measures to prevent environmental degradation. Rather, the Commission as a trustee has a duty to take anticipatory action to prevent harm to public resources. At minimum, “the absence of firm scientific proof should not tie the Commission’s hands in adopting reasonable measures designed to further the public interest.”¹⁹

¹⁹ *Waiāhole I*, at 154, 155.

- The irrigation ditch systems in the Lahaina aquifer sector cross multiple aquifer systems and surface water hydrologic units. (See Figure 4) In *Waiāhole I*, the Hawai‘i Supreme Court also held that the Commission can consolidate the regulation of a single system because it comports with the Commission’s function of comprehensive water planning and management.²⁰ The Court ruled that the areas covered by the ditch system are to be considered hydrologically controllable irrespective of hydrologic units under HRS § 174C-50 (h) which deems uses between existing users as competing when water is drawn from a hydrologically controllable area.²¹
 - In *Waiāhole I*, the Court acknowledged the direct interrelationship between ground and surface waters and held that the designation of Windward O‘ahu as a ground water management area subjected both ground and surface water diversions from the designated area to the statutory permit requirement.²²
3. Designation undermines current efforts in Maui WUDP and West Maui Community Plan to engage public, private purveyors, and county agencies in land use and water planning integration.
- We acknowledge MDWS’s significant effort, time and commitment spent in producing a comprehensive Maui Island Water Use and Development Plan (MIWUDP) and understand that the Maui County Council is currently reviewing the MIWUDP through its public hearing process and receiving public input on the WUDP. We also acknowledge MDWS’s close coordination with Commission Staff ,the Maui Planning Department, and the community throughout this planning process. We encourage MDWS to continue its approval process for the MIWUDP while continuing to consult with Commission staff. Designation of Lahaina Sector as a ground and surface water management area will compliment and strengthen MDWS plans for future water development instead of undermining them, while ensuring the protection of public trust purposes and resources for future generations.
 - The State Water Code requires all counties to develop WUDP regardless of water management area designation. In fact, designation of a water management area and its subsequent Water Use Permit Application (“WUPA”) process fosters more public and private participation including notice and public hearing requirements. A Water Use Permit is issued to reasonable and beneficial uses of water and will ensure even greater consistency and integration between land use and water resource availability. Moreover, the Hawai‘i Supreme Court held in *Ko‘olau Ag* that there is no judicial review of the Commission’s decision to designate aquifers as water management areas because the rights of individual water users are fully protected in the permitting process. The Court further noted that water management area designations do not affect the interests of any potential water users; the impact of such a designation is only that the user’s water source is subject to the Commission’s regulation, which does not, in and of itself, affect the user’s water rights.²³
4. Based on cooperative studies with USGS to address threats of salt water intrusion and climate change impacts, Maui DWS plans to distribute pumpage throughout Launiupoko aquifer.
- While DWS can space pumpage through Launiupoko to minimize salt water intrusion in their wells, there are additional private wells that are being developed that may have impacts on other existing wells, including Maui DWS, and the larger aquifer as a whole. As such, designation will provide CWRM, as a regulator, the ability to determine the proper spacing of all wells to protect the aquifer and other legally permitted water uses.

²⁰ *Waiāhole I*, at 174.

²¹ *Id.*

²² *Waiāhole I*, at 173.

²³ *Ko‘olau Agricultural Co., Ltd. v. Comm’n on Water Res. Mgmt* (“Ko‘olau Ag.”), 83 Hawai‘i 484, 493 (1994).

5. Utilize groundwater models and monitoring data to ensure adequate pump distributions vs. designation.
 - In addition to the pumpage data that’s discussed above, the Commission only receives chloride data from 20 of 66 wells that report in the Lahaina district and water level data from its sole deep monitoring well. Based on that data and estimated future reduction in recharge, there is already indication of potential threats to water resources and increased management is important.

6. Request to defer SWMA proceedings until IIFS can be adopted for other priority streams. Balancing reasonable and beneficial in-stream and off-stream uses via water use permitting of both surface and groundwater resources will provide better data in determining the most appropriate IIFS.
 - The surface water conflicts in this region have been persistent for decades. Setting of IIFS and managing surface water use permits are not mutually exclusive and are handled by different staff. Commission staff anticipate completing all IIFS for relevant streams in the Lahaina district in the coming year, but deferral of designation is not dependent on establishment of an IIFS, as these are interim in nature and are meant to be iterative based on continuous evaluation and balancing of instream and off-stream needs.

The Commission has not received any formal response or comments from Mayor Victorino.

Based on Commission discussion and public testimony, staff anticipate bringing a submittal in February 2022 to act on the Chairperson’s recommendation regarding designation of water management area and to hold public hearing HRS § 174C-42.

In summary, there are various criteria that are met for designation of both surface and groundwater aquifers. The Commission has an opportunity to protect and manage water resources in an integrated manner and at an aquifer sector level proactively and holistically.

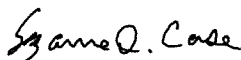
Ola i ka wai,



M. KALEO MANUEL
Deputy Director

- Exhibits:
- 1 CWRM Public Comment to PUC December 17, 2021
 2. CWRM Letter November 29, 2021
 3. County Council Correspondence
 4. Maui DWS Letter

APPROVED FOR SUBMITTAL:



SUZANNE D. CASE
Chairperson

DAVID Y. IGE
GOVERNOR OF HAWAII



SUZANNE D. CASE
CHAIRPERSON

MICHAEL G. BUCK
ELIZABETH A. CHAR, M.D.
NEIL J. HANNAHS
AURORA KAGAWA-VIVIANI, PH.D.
WAYNE K. KATAYAMA
PAUL J. MEYER

M. KALEO MANUEL
DEPUTY DIRECTOR

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

December 17, 2021

The Honorable Chair and Members of the
Hawai'i Public Utilities Commission
State of Hawai'i
465 South King Street, Room 103
Honolulu, Hawai'i 96813

Dear Commissioners:

Re: Request for Public Comment in Docket No. 2020-0089, Launiupoko Irrigation Company, Inc. Application for a Change in Rates and Other Approvals

The Commission on Water Resource Management (CWRM) responds to the Hawai'i Public Utilities Commission's (Commission) request for public comment in Docket No. 2020-0089 on Launiupoko Irrigation Company's (LIC) rate case. The Commission requested CWRM's analysis on its understanding of LIC's current irrigation water needs and available surface water. CWRM would like to preface its answers to questions below with the caveat that surface water availability highly fluctuates because of the flashiness of streams that don't always align with water and energy utilities' needs and demands. The Commission specifically wanted to know the following:

- 1) *CWRM's estimate of the surface water currently available from both the Kaua'ula and Launiupoko streams that LIC can use while still meeting those streams' interim instream flow standard (IIFS);*

The IIFS for Kaua'ula stream is 5.2 cubic feet per second (cfs) (3.36 million gallons per day (mgd)) below the main diversion, near an altitude of 1,540 feet, and 6.35 cfs (4.1 mgd) below the kuleana users near an altitude of 270 feet. The IIFS for Launiupoko stream is 0 cfs (0 mgd) below the diversion, near an altitude of 1,340 feet, meaning that LIC can divert 100% of the streamflow of Launiupoko stream.

To accommodate LIC's transition to other non-potable water sources, CWRM did agree to phase in the implementation of the IIFS for Kaua'ula stream and provided a timeline for the year of 2018. This phased approach required an immediate release of 1 mgd below the main diversion on March 27, 2018 and 0.8 mgd at the siphon from Kaua'ula Ditch; phase 2 required the release of 2 mgd below the main diversion on September 24, 2018 and 0.8 mgd at the siphon from Kaua'ula Ditch.¹

¹ CWRM letter to LIC from May 7, 2018. See Exhibit B of Application for a Change in Rates and Other Approvals; Exhibits A through M; Verification; Docket 2020-0217 from 12/30/2020.

CWRM staff has data that indicates that LIC has not been in compliance with the IIFS since CWRM’s March 2018 order and the phased approach agreed upon on May 7, 2018. See attached Exhibit A. CWRM’s estimate of the surface water available from Kaua‘ula stream can be found in Table 1 of Exhibit A. That table references CWRM’s analysis of the real time data from the U.S. Geological Survey (USGS) gages above and below the main diversion. Prior to the installation of the USGS gages, LIC’s reported water use is listed in Exhibit B. LIC has not reported water use from September 2018 to June 2020. In 2018, CWRM staff took spot measurements that are shown in Exhibit A Table 3. Additionally, CWRM staff has a monitoring station in Kaua‘ula stream at about 210ft elevation. See Exhibit A Table 4 and 5. These tables reference measurements from that location. CWRM does not have a stream gage in Launiupoko stream, and it is LIC’s responsibility to monitor the surface water removed from Launiupoko stream. LIC’s reported water use for Launiupoko stream is shown in Exhibit C.

2) *CWRM’s estimate of LIC’s current irrigation water needs, and whether surface water withdrawals within the IIFS limits are sufficient to meet these needs;*

Establishing IIFSs is the “primary mechanism” by which CWRM discharges its affirmative “duty to protect and promote the entire range of public trust purposes dependent on upon instream flow.”² The public trust embodies a “dual mandate of 1) protection and 2) maximum reasonable and beneficial use.”³ Therefore, the public trust is “the duty and authority to maintain the purity and flow of our waters for future generations and to assure that the waters of our land are put to reasonable and beneficial uses.”⁴ The Hawai‘i Supreme Court has recognized four public trust purposes; the maintenance of water in its natural state, domestic water uses, water for the Department of Hawaiian Home Lands, and water use in the exercise of traditional and customary Native Hawaiian rights.⁵ Private commercial uses are not protected by the public trust and are subject to a “higher level of scrutiny.”⁶

The State Water Code defines an instream flow standard as a “quantity or flow of water or depth of water which is required to be present at a specific location in a stream system at certain specified times of the year to protect fishery, wildlife, recreational, aesthetic, scenic, and other beneficial instream uses.” See Hawaii Revised Statutes (HRS) § 174C-3 (“Definitions”). In considering a petition to amend an interim instream flow standard, the Code directs CWRM to “weigh the importance of the present or potential instream values with the importance of the present or potential uses of water for noninstream purposes, including the economic impact of restricting such uses.” HRS §174C-71(2)(D).

² *In re Water Use Permit Applications (“Waiahole I”)*, 94 Hawai‘i 97, 148, 9 P.3d 409, 460 (2000).

³ *Id.* at 139, 9 P.3d 445.

⁴ *Id.* at 138, 9 P.3d 450.

⁵ *See Kauai Springs, Inc. v. Planning Comm’n of Kaua‘i*, 133 Hawai‘i 141, 172, 324 P.3d 951, 982 (2014).

⁶ *Id.*

“Instream use” means beneficial uses of stream water for significant purposes which are located in the stream and which are achieved by leaving the water in the stream. Instream uses include, but are not limited to:

- 1) Maintenance of fish and wildlife habitats;
- 2) Outdoor recreational activities;
- 3) Maintenance of ecosystems such as estuaries, wetlands, and stream vegetation;
- 4) Aesthetic values such as waterfalls and scenic waterways;
- 5) Navigation;
- 6) Instream hydropower generation;
- 7) Maintenance of water quality;
- 8) The conveyance of irrigation and domestic water supplies to downstream points of diversion; and
- 9) The protection of traditional and customary Hawaiian rights.

“Noninstream use” means the use of stream water that is diverted or removed from its stream channel and includes the use of stream water outside of the channel for domestic, agricultural, and industrial purposes.

Since the establishment of the Stream Protection and Management Branch in July 2002, CWRM has been developing a framework for setting measurable instream flow standards statewide. This framework involves an assessment of natural flow conditions, an analysis of the instream uses protected by the State Water Code, the existing and planned noninstream reasonable and beneficial uses of surface water, and the availability of water from alternative sources.

To assess the natural flow conditions, CWRM relied on data from USGS Scientific Investigations Report (2014-5087)⁷, which was a cooperative study from 2011 to 2013 funded by CWRM and USGS to assess low-flow characteristics for streams in the Lahaina District for the 1984-2013 climate period. See Table 1 below. The 50-percent flow-duration discharge, commonly referred to as median (Q50) discharge, is the flow that has been equaled or exceeded 50 percent of the time during a given period of record. Flow-duration discharges that describe low-flow conditions are generally considered to be those equal to or less than the Q50 discharge. The Q₉₀ flow is the flow estimated to be exceeded 90% of the time for the 30-year period 1984-2013 (i.e., on 10% of the time will streamflow be less than this value)

⁷ Cheng, C.L., 2014, USGS Scientific Investigations Report 2014-5087, Low-Flow Characteristics of Streams in the Lahaina District, West Maui, Hawai'i, available at <https://pubs.usgs.gov/sir/2014/5087/pdf/sir2014-5087.pdf>

Table 1. Estimated natural median (Q₅₀) and low-flow (Q₇₀ and Q₉₀) values for four hydrologic units on West Maui (from USGS Report Cheng 2014) above the main diversion. [cfs = cubic feet per second; mgd = million gallons per day]

Hydrologic Unit	Estimated natural-flow Q50	Estimated natural-flow Q60	Estimated natural-flow Q70	Estimated natural-flow Q80	Estimated natural-flow Q90
Launiupoko (6006)	0.47 cfs (0.30 mgd)	0.44 cfs (0.28 mgd)	0.41 cfs (0.26 mgd)	0.38 cfs (0.25 mgd)	0.35 cfs (0.23 mgd)
Kaua'ula (6007)	9.5 cfs (6.14 mgd)	8.1 cfs (5.24 mgd)	7.1 cfs (4.59 mgd)	6.2 cfs (4.00 mgd)	5.2 cfs (3.36 mgd)

CWRM weighs often competing instream and noninstream uses of water against the amount of water available to accommodate the needs of these uses, where priority is always given to public trust purposes of water. If there is sufficient water to meet the instream uses, then noninstream uses can be considered. The availability of alternative water sources to meet the needs of noninstream uses is also considered. This process is based upon best available information when weighing the present or potential, instream and noninstream uses. In this process CWRM uses hydrologic considerations, instream use considerations, and noninstream considerations.⁸

To assist the balancing between the protection of the public trust purposes and other instream uses and noninstream uses, CWRM distinguished LIC's various noninstream irrigation water needs as agricultural-zoned farm lots, small commercial agricultural operations, and landscaping within private and common use areas.

CWRM used the Irrigation Water Requirement Estimation Decision Support System (IWREDSS) to estimate the irrigation demand for LIC's various noninstream uses.⁹ IWREDSS is an ArcGIS-based numerical simulation model that estimates irrigation demand and water budget components for different crops grown in the Hawaiian environment. The model accounts for different irrigation application systems and water application practices. Using the existing TMK layer and remote sensing data (World View 2.0 satellite imagery, Google Earth, and Google Streetmaps), the approximate acreage of agriculture (and type where possible) and acreage of landscaping was estimated. See data visualized in Exhibit E Figures 1 and 2. Table 2 below details an estimate of LIC's irrigation water needs by use.

⁸ For detailed information on Kaua'ula and Launiupoko hydrologic units see Staff Submittal Amended Interim Instream Flow Standards for the Surface Water Hydrologic Units of Ukumehame (6004), Olowalu (6005), Launiupoko, (6006), and Kaua'ula (6007), Maui from March 20, 2018. Available at <https://files.hawaii.gov/dlnr/cwrmm/submittal/2018/sb20180320B1.pdf>

⁹ See Instream Flow Standard Assessment Report (IFSAR), Kaua'ula Unit 6007, PR-2018-04, at 106-199. Available at <https://files.hawaii.gov/dlnr/cwrmm/ifsar/PR201804-6007-Kaua'ula.pdf>

Table 2. Estimated non-potable water use for Launiupoko and Kaua‘ula hydrologic units and reported water diverted in 2017. Agriculture and landscaping uses are combined since they share a common distribution system managed by LIC.

Hydrologic Unit	Water Users	Method	Estimated Use
Launiupoko			
Reported Water Diverted:	0.643 cfs (0.416 mgd)		
Kaua‘ula	Kamehameha Schools lessees (diversified agriculture 13 acres, cacao 53 acres)	Reported	0.613 cfs (0.396 mgd)
	Agriculturally zoned parcels (irrigated pasture 10 acres, diversified agriculture 43 acres, tree crops 35 acres)	IWREDSS	0.469 cfs (0.303 mgd)
	Landscaping (194 acres)	IWREDSS	1.502 cfs (0.969 mgd)
	Return to stream	Reported	1.550 cfs (1.000 mgd)
Reported Water Diverted:	7.09 cfs (4.58 mgd)	Total Water Use:	4.134 cfs (2.672 mgd)

Additionally, in 2018, CWRM considered that LIC provides a small amount of water that is pumped up hill to TMK parcels, which may have appurtenant rights, originally fulfilled by the Pi‘ilani ‘auwai, which was subsequently replaced by the Kaua‘ula Ditch during the plantation era. LIC approximately 1.5 cfs (1.0 mgd) released at the Kaua‘ula siphon back into Kaua‘ula stream after the hydropower plant to support lo‘i agriculture for kuleana users in Kaua‘ula Gulch, as part of an informal agreement. Non-potable water is also provided directly to these homes via a separate transmission pipe on the west side of the gulch. See Exhibit G.

When establishing the IIFS for Kaua‘ula stream, CWRM found that a lack of streamflow has continued to impede kuleana uses of water, including traditional and customary gathering practices, the cultivation of taro, and the recreational use of water. Insufficient flow is affecting taro cultivation and traditional gathering in Kaua‘ula Valley. There is currently one ‘auwai supplying sufficient water for six lo‘i, but recent field investigations revealed that as many as 33 lo‘i have been cleared and are ready to be planted if sufficient water were supplied.

CWRM assumed that restoration of flows to Kaua'ula stream will greatly benefit native aquatic species since native species are common in nearby streams that support smaller flows. The IIFS is designed to provide habitat and maintain a wetted pathway between the Kaua'ula stream diversion and the siphon release point.

CWRM also found that the IIFS for Kaua'ula stream would allow LIC to meet the 0.4 mgd agricultural demand for Kamehameha Schools' lessee 100-percent of the time, and LIC could meet their 0.303 mgd agricultural use water demand 100-percent of the time, when combined with water diverted from Launiupoko stream. See Exhibit G and H. LIC's landscaping irrigation needs could be met with pumping groundwater as an alternative water source. CWRM also advised that "[w]ater conservation should be mandated throughout the [Launiupoko] hydrologic unit, including the planting of drought tolerant plants. Large expanses of sod as landscaping is an inappropriate use of scarce water resources and should be eliminated as much as possible."

To assess LIC's current irrigation water needs as requested by the Commission, CWRM has not conducted an update of the IWREDSS due to the extensive research this entails to estimate the current agricultural and landscaping uses of LIC's customers. CWRM staff assumes that LIC's water needs for landscaping have increased due to more lots having been developed in the past four years with a potential slight increase for agricultural uses as well.

CWRM relies on the cooperation of diverters to report their water use timely. On December 14, 2021, CWRM has received LIC's report of its water use for the Launiupoko stream diversion for the entire year of 2021. See Exhibit C. On September 28, 2021, CWRM requested LIC to provide reports of the amount of water distributed to Ku'ia Estate Chocolate (KEC), the Kaua'ula valley homes, Kaua'ula reservoir, and returned to the stream at the siphon immediately. On October 28, 2021, LIC provided the above requested data with the exception of the flow into Kaua'ula reservoir.¹⁰

CWRM's preliminary analysis of this data found that KEC's daily water use, which ranges approximately between 0.060 and 0.108 mgd, is less than CWRM's 2018 estimated need of 0.396 mgd. However, CWRM would like to highlight that water use is not an indication of the actual need. KEC's need may indeed be higher as the reported use, which could be due to LIC's curtailments or not having reached full buildout yet. Moreover, the eight months span of LIC's reported use is an extremely small sample size for hydrology, and this sample occurred during one of the most severe hydrological droughts on record for Maui. For example, between June and July 2021 (51 days), flow at Wailuku River at Kepaniwai Park (USGS 16604500) was below Q_{75} 33 days, below Q_{85} 21 days, and below Q_{95} 5 days.

The average daily water use of the Kaua'ula valley homes is 0.058 mgd and the total Kapu uses average between 0.032 and 0.112 mgd based on the report by LIC. CWRM would like to note that the reported water use for Kapu 1" and 1.5" is not a total consumptive use and an unknown amount of water is returned from the kalo lo'i back to LIC's ditch system. Traditional kalo cultivation utilizes a throughflow of irrigation water and is only minimally consumptive. On December 9, 2021, CWRM received a formal complaint by Na Aikane O Maui and Ke'eaumoku Kapu alleging

¹⁰ LIC Letter to CWRM from October 28, 2021. See Letter From: R. Strand To: Commission Re: Launiupoko Irrigation Co., Inc., Docket No. 2020-0089 from 11/12/21.

wasted water by LIC at various location of LIC's system. This alleged waste potentially affected the kuleana users' reported water use by LIC as well. CWRM will forward this formal letter to LIC for their response. Additionally, CWRM would like to highlight for the Commission that some of the Kaua'ula valley water uses are considered domestic uses, which is one of the public trust purposes.

Based on the data provided by LIC, CWRM staff estimates that the total daily noninstream water use for KEC's agricultural uses and other constitutionally protected uses averages between 0.150 and 0.280 mgd. Table 1 of Exhibit A shows when the 0.280 mgd of use was available to divert in 2021 (highlighted in green). In 2021, LIC's agricultural uses of 0.303 mgd could be met with surface water diverted by Launiupoko every month except for June and September, including considering a small increase of agricultural uses as well. See Exhibit C.

CWRM would like to note that LIC in its request for a certificate of public convenience and necessity (CPCN) estimated its non-potable water demand to be approximately 1.331 mgd at full 6000 acres buildout in 2008.¹¹ See PUC Docket No. 2002-0203. LIC's projection was that Kaua'ula and Launiupoko stream together would provide a supply of 2.1 mgd of surface water and the estimated demand of 1.331 mgd is approximately 63% of the estimated supply. Already in 2018 LIC exceeded its own estimated demand and continues to do so in 2021.

3) Does CWRM expect LIC's current irrigation water needs to change over the next 12-18 months?

CWRM cannot determine LIC's future irrigation water needs, but CWRM has been preparing for changes in rainfall and an increased frequency of extreme weather events such as droughts and flooding. In March 2019, CWRM entered into a joint funding agreement with USGS to estimate ground water recharge for future climate conditions in Hawai'i.¹² Results of this study are expected to be published in early 2022.

Additionally, CWRM would like to clarify statements made by LIC in its application for general rate increase and notify the Commission of other pending items concerning LIC before CWRM.

In its application LIC stated that "[r]ecent governmental rule changes and usage demands have led to the necessity to locate and improve additional sources to provide continued service to the service area community."¹³ CWRM fulfilled its affirmative constitutional duty to protect public trust purposes when establishing a numeric IIFS for Kaua'ula stream in March of 2018. This does not constitute a governmental rule change. Furthermore, CWRM's Hawai'i Administrative Rules (HAR) explicitly provide that "[i]nterim instream flow standards are by their nature temporary and subject to change. Consequently, any reliance upon the interim standards shall be at the water user's own risk." See HAR § 13-169-43 (b).

¹¹ Decision and Order No. 20424 at 3, PUC Docket No. 2002-0203

<https://dms.puc.hawaii.gov/dms/DocumentViewer?pid=A1001001A08D19B13930H17002>

¹² Available at <https://files.hawaii.gov/dlnr/cwrmsubmittal/2019/sb20190319B1.pdf>

¹³ Application for a Change in Rates and Other Approvals; Exhibits A through M; Verification; Docket 2020-0217 from 12/30/2020, Exhibit A at 1.

LIC also stated the following: “As the severe limitation of Applicant’s primary non-potable water source was effectuated with little warning by the CWRM, Applicant could not adequately anticipate the significant disruption in the purveyance of non-potable water and Applicant experienced significant expenses that could not be recovered in the current rate structure, as the current rate structure assumed gravity fed water sources, rather than pumped groundwater sources.”¹⁴

CWRM provided ample notice of its intent to set a numeric IIFSs for ten streams in West Maui. On March 16, 2011, CWRM entered into a joint funding agreement with USGS to conduct a study of low-flow characteristics for streams in the Lahaina district.¹⁵ West Maui Land Company (WML) provided access to the study sites from 2011 to 2013, and WML and Peter Martin did participate in a stakeholder meeting with USGS on May 1, 2014. In October 2016, CWRM began its outreach to irrigation managers, landowners, and community groups and conducted its first site visit to Launiupoko on December 1, where introductions with WML employees took place. On January 25, 2017, CWRM met with WML at their Kahului office.

The following are pending items concerning LIC before CWRM.

On September 28, 2021, CWRM has notified LIC that the company has not been meeting the IIFS established on March 20, 2018 and has not implemented CWRM’s order to modify LIC’s stream diversion.¹⁶ In this letter CWRM staff also requested LIC to install appropriate measuring devices (e.g., rated flume, weir with staff plate) and to monitor the amount of water flowing to Kaua’ula Reservoir above the siphon within 90 days. On October 28, 2021, LIC replied stating that within 30 days LIC would submit conceptual plans for the modification and that “[c]ommencement of these modifications will be conditioned on LIC’s receipt of a revised temporary rate increase from the PUC providing LIC with funds required to fund pumping costs and to meet other operating expenses not objected to by the Consumer Advocate and to remove the condition to discontinue rationing in drought conditions.”¹⁷ On November, 29 2021, LIC submitted conceptual plans for the modifications of the diversion structure and reiterated above mentioned condition for commencement of the modification. See Exhibit D. CWRM staff is currently reviewing the conceptual plans. While CWRM understands there are costs associated with modifications, CWRM orders cannot be made dependent on funding relief through orders by the Commission.

On September 29, 2021, CWRM notified Wainee Land and Homes, LLC that CWRM requires a pump installation permit for the installation of a 700 gallons per minute (gpm) pump at the State Well No. 6-5240-002 (TMK (2) 4-6-015:001) and if Wainee Land and Homes, LLC intends to install a second pump another pump installation permit is required prior to commencement of work. See attached Exhibit F. Wainee Land and Homes, LLC is the landowner of the latter TMK parcel including the State Well Nos. 6-5240-002 and -003 and has an easement agreement with

¹⁴ Application for a Change in Rates and Other Approvals; Exhibits A through M; Verification; Docket 2020-0217 from 12/30/2020, at 7-8.

¹⁵ <https://files.hawaii.gov/dlnr/cwrml/submittal/2011/sb201103C1.pdf>

¹⁶ CWRM Letter to LIC from September 28, 2021 (Ref: CWRM.5738.6). See Letter From: R. Strand To: Commission Re: Launiupoko Irrigation Co., Inc., Docket No. 2020-0089 from 11/12/21.

¹⁷ LIC Letter to CWRM from October 28, 2021. See Letter From: R. Strand To: Commission Re: Launiupoko Irrigation Co., Inc., Docket No. 2020-0089 from 11/12/21.

LIC who is the proposed well operator.¹⁸ LIC refers to these wells as Wainee A/B skimming wells and the pump installations are part of LIC's capital improvement projects.¹⁹ CWRM has only received a Well Completion Report Part II from West Maui Construction for State Well No. 6-5240-002 and is awaiting a pump installation permit application.

As mentioned earlier, on December 9, 2021, CWRM received a formal complaint by Na Aikane O Maui alleging wasted water by LIC at various location of LIC's irrigation system that potentially affect kuleana users' reported water use by LIC. CWRM will forward this formal letter to LIC for their response.

If there are any questions, please contact me at kaleo.l.manuel@hawaii.gov or via phone at 808-587-0214.

Ola i ka wai,



M. Kaleo Manuel
Deputy Director

Attachments:

- Exhibit A – CWRM Data for Kaua'ula Stream
- Exhibit B – LIC Reported Data for Kaua'ula Stream
- Exhibit C – LIC Reported Data for Launiupoko Stream
- Exhibit D – LIC Letter to CWRM from November 29, 2021
- Exhibit E – IWREDSS Figures
- Exhibit F – CWRM Letter to Wainee Land and Homes, LLC (Ref: 6-5240-002 and -003.let.docx)
- Exhibit G – Kaua'ula Schematic
- Exhibit H – Launiupoko Schematic

¹⁸ See Attachment 1 to Launiupoko Irrigation Co., Inc.'s Responses to Consumer Advocate's Second Submission of Information Requests; Exhibits; Verification; Docket No. 2020-0089 from 10/22/21, at 143 [PDF], Lease of Easement.

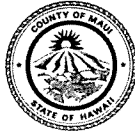
¹⁹ See Launiupoko Irrigation Co., Inc.'s Responses to Public Utilities Commission's Information Requests; Exhibits; Verification; Docket No. 2020-0089 from 11/24/2021; PUC-LIC-IR-04 referencing Exhibit G Update.

Council Chair
Alice L. Lee

Vice-Chair
Keani N.W. Rawlins-Fernandez

Presiding Officer Pro Tempore
Tasha Kama

Councilmembers
Gabe Johnson
Kelly Takaya King
Michael J. Molina
Tamara Paltin
Shane M. Sinenci
Yuki Lei K. Sugimura



Director of Council Services
Traci N. T. Fujita, Esq.

Deputy Director of Council Services
David M. Raatz, Jr., Esq.

COUNTY COUNCIL
COUNTY OF MAUI
200 S. HIGH STREET
WAILUKU, MAUI, HAWAII 96793
www.MauiCounty.us

December 29, 2021

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

Via email only: kaleo.l.manuel@hawaii.gov

Dear Mr. Manuel:

**SUBJECT: CONSULTATION ON RECOMMENDATION TO
DESIGNATE THE LAHAINA AQUIFER SECTOR AS
SURFACE WATER AND GROUND WATER
MANAGEMENT AREA (PAF 21-358)**

Thank you for your responsive correspondence dated December 17, 2021, on the designation of the Lahaina Aquifer Sector on Maui as a Surface Water and Ground Water Management Area. Copies of our earlier correspondence are attached for ease of reference.

Unfortunately, much of the information provided is difficult to understand. To provide an informed policy response, it would be beneficial to receive a summary and justification of the technical tables and charts.

Because the Maui County Council is required to make land-use and fiscal decisions on the entire County's water resources and delivery systems, I respectfully suggest a comprehensive presentation is needed to fulfill the consultation requirements of Section 174C-41(b), Hawaii Revised Statutes. For this reason, I remain unable to provide substantive comments by the December 31, 2021, deadline. Instead, I will attend the Commission on Water Resource Management's January 18, 2022, meeting to learn more and perhaps ask questions.

M. Kaleo Manuel
December 29, 2021
Page 2

If you have any further comments or questions, please email your response to paige.greco@mauicounty.us and county.council@mauicounty.us. To ensure efficient processing, please include the relevant PAF number in the subject line of your response.

Should you have any questions, please contact me, Legislative Analyst Paige Greco at (808) 270-7660, or Legislative Analyst Alison Stewart at (808) 270-7661.

Sincerely,

A handwritten signature in black ink, appearing to read "Alice L. Lee". The signature is fluid and cursive, with a large initial "A" and "L".

ALICE L. LEE, Chair
Maui County Council

paf:pmg:21-358c

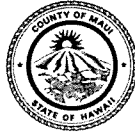
Attachments

Council Chair
Alice L. Lee

Vice-Chair
Keani N.W. Rawlins-Fernandez

Presiding Officer Pro Tempore
Tasha Kama

Councilmembers
Gabe Johnson
Kelly Takaya King
Michael J. Molina
Tamara Paltin
Shane M. Sinenci
Yuki Lei K. Sugimura



Director of Council Services
Traci N. T. Fujita, Esq.

Deputy Director of Council Services
David M. Raatz, Jr., Esq.

COUNTY COUNCIL
COUNTY OF MAUI
200 S. HIGH STREET
WAILUKU, MAUI, HAWAII 96793
www.MauiCounty.us

December 7, 2021

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

kaleo.l.manuel@hawaii.gov

Dear Mr. Manuel:

**SUBJECT: CONSULTATION ON RECOMMENDATION TO
DESIGNATE THE LAHAINA AQUIFER SECTOR AS
SURFACE WATER AND GROUND WATER
MANAGEMENT AREA (PAF 21-358)**

Thank you for your correspondence dated November 29, 2021, relating to the designation of the Lahaina Aquifer Sector on Maui as a Surface Water and Ground Water Management Area. Without supporting factual data on the proposed designation, it is difficult to provide comments. Respectfully, I note the request merely characterizes factual data without sharing it, which appears contrary to the consultation requirements of Section 174C-41(b), Hawaii Revised Statutes.

May I please request a response to the following questions:

1. Can the Commission share with the Maui County Council the relevant factual data indicating "there is harm to ground water quantity and quality"?
2. Would the Chairperson be willing to appear before the Council or one of its committees to provide a presentation and answer questions regarding the proposal?
3. If the consultation finds the factual data supports the recommended designation, what would be the process and anticipated timeline, including opportunities for stakeholder and public engagement?

M. Kaleo Manuel
December 7, 2021
Page 2

Please email your response to paige.greco@mauicounty.us. To ensure efficient processing, please include the relevant PAF number in the subject line of your response.

Should you have any questions, please contact me, Legislative Analyst Paige Greco at (808) 270-7660, or Legislative Analyst Alison Stewart at (808) 270-7661.

Sincerely,

A handwritten signature in cursive script, appearing to read "Alice L. Lee".

ALICE L. LEE, Chair
Maui County Council

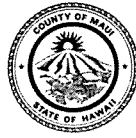
paf:pmg:21-358a

Council Chair
Alice L. Lee

Vice-Chair
Keani N.W. Rawlins-Fernandez

Presiding Officer Pro Tempore
Tasha Kama

Councilmembers
Gabe Johnson
Kelly Takaya King
Michael J. Molina
Tamara Paltin
Shane M. Sinenci
Yuki Lei K. Sugimura



Director of Council Services
Traci N. T. Fujita, Esq.

Deputy Director of Council Services
David M. Raatz, Jr., Esq.

COUNTY COUNCIL
COUNTY OF MAUI
200 S. HIGH STREET
WAILUKU, MAUI, HAWAII 96793
www.MauiCounty.us

December 16, 2021

Mr. M. Kaleo Manuel, Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

kaleo.1.manuel@hawaii.gov

Dear Mr. Manuel:

**SUBJECT: CONSULTATION ON RECOMMENDATION TO
DESIGNATE THE LAHAINA AQUIFER SECTOR AS
SURFACE WATER AND GROUND WATER
MANAGEMENT AREA (PAF 21-358)**

May I kindly request a response to my attached correspondence, dated December 7, 2021, by December 20, 2021. This will allow adequate time for me to respond with my comments by your December 30, 2021, deadline.

Please email your response to county.council@mauicounty.us and paige.greco@mauicounty.us. To ensure efficient processing, please include the relevant PAF number in the subject line of your response.

Should you have any questions, please contact me, Legislative Analyst Paige Greco at (808) 270-7660, or Legislative Analyst Alison Stewart at (808) 270-7661.

Sincerely,

A handwritten signature in cursive script that reads "Alice L. Lee".

ALICE L. LEE, Chair
Maui County Council

paf:pmg:21-358b

Attachment



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

December 17, 2021

Honorable Chair Alice L. Lee and Councilmembers
Maui County Council
Kalana O Maui Building, Eighth Floor
200 South High St.
Wailuku, Hawai'i 96793

Aloha e Honorable Chair Alice L. Lee,

Subject: Response to Council Letters Dated December 7 and December 16, 2021

Mahalo for your two letters dated December 7 and December 16, 2021 in response to the Commission on Water Resource Management's (Commission) letter dated November 29, 2021 related to the designation of the Lahaina Aquifer Sector on Maui as a Surface Water and Ground Water Management Area. Please see our responses to your questions below:

1. *Can the Commission share with the Maui County Council the relevant factual data indicating "there is harm to ground water quantity and quality"?*

Please see the attached figures and tables with data on water resource availability, infrastructure, pumpage, reporting, permitted use, and chloride data.

2. *Would the Chairperson be willing to appear before the Council or one of its committees to provide a presentation and answer questions regarding the proposal?*

There will be a presentation to the Commission at its January 18, 2021 meeting on this matter and the Commission would encourage the Council and public to participate and attend. If the Council has any additional questions after review of the attached data and the presentation on January 18, 2021, Commission staff and I can appear before the Council or one of its committees to provide a presentation and answer additional questions.

3. *If the consultation finds the factual data supports the recommended designation, what would be the process and anticipated timeline, including opportunities for stakeholder and public engagement?*

The Designation process is governed by Hawaii Revised Statutes (HRS), Sections 174C-41 to 46 and a summary of that process is identified below.

- (1) Recommendation to designate by the Chairperson or by written petition for initiation or continuation of investigation of the situation in the proposed management area; HRS § 174C-41(a).
- (2) Consultation with county council, county mayor, and county water board concerning the recommendation or petition; HRS §174C-41(b).
- (3) Commission action to accept recommendation regarding designation of water management area and to hold public hearing; HRS §174C-42.
- (4) Notice for and Conduct of Public Hearing; HRS §174C-42.
- (5) Commission action to accept, deny, or defer recommendation to designate a water management area; HRS §174C-46.

As mentioned above, the Commission staff will be doing a presentation to the Commission in January 2022. Based on that presentation, we anticipate an action item in February to continue the designation process. As the next step the Commission would conduct a Public Hearing. Both of those Commission meetings provide an opportunity for stakeholders and the public to engage and provide comment and testimony. The Public Hearing is planned for March 2022. Pending that Public Hearing, a final recommendation on designation would be presented to the Commission in April or May. These are all the opportunities for stakeholder and public engagement.

If there are any additional questions, please contact me at (808) 587-0214 or via email at kaleo.l.manuel@hawaii.gov.

Ola i ka wai,



M. Kaleo Manuel
Deputy Director

Attachment

cc: Councilmember Keani Rawlins-Fernandez
Councilmember Gabe Johnson
Councilmember Tasha Kama
Councilmember Kelly Takaya King
Councilmember Mike Molina
Councilmember Tamara Paltin
Councilmember Shane Sinenci
Councilmember Yuki Lei Sugimura
Mayor Michael P. Victorino
Chair Dean Frampton, Maui Board of Water Supply
Director Jeff Pearson, Maui Dept. of Water Supply

Figure 1. Ground Water Aquifer System Areas and their sustainable yields (SY) for the Lahaina Aquifer Sector with overlaying surface water hydrologic units and their perennial and intermittent streams with development tunnels and active irrigation ditch systems.

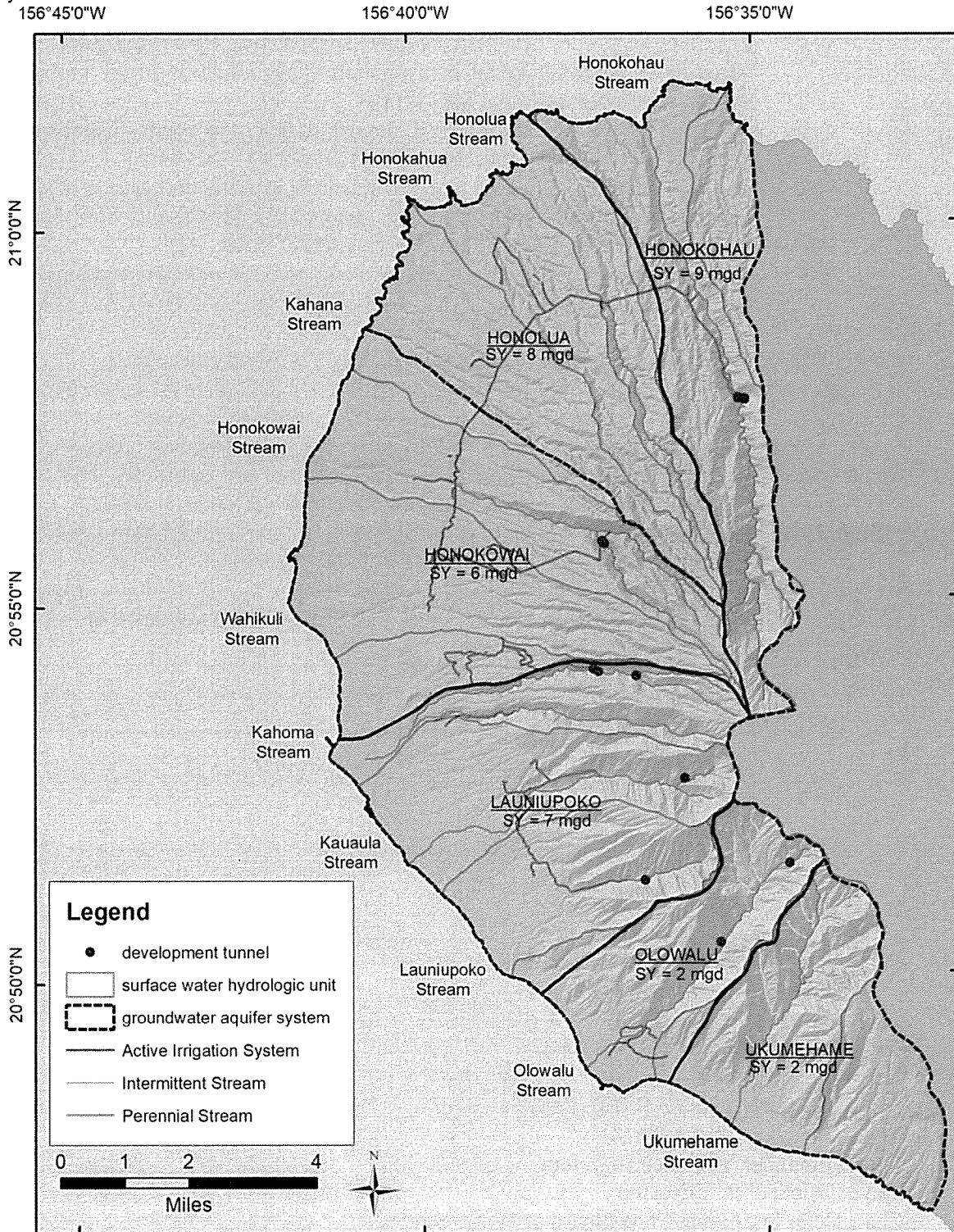


Figure 2. Distribution of regional aquifer hydraulic conductivity in central and West Maui, Hawai'i (Gingerich and Engott, 2012)

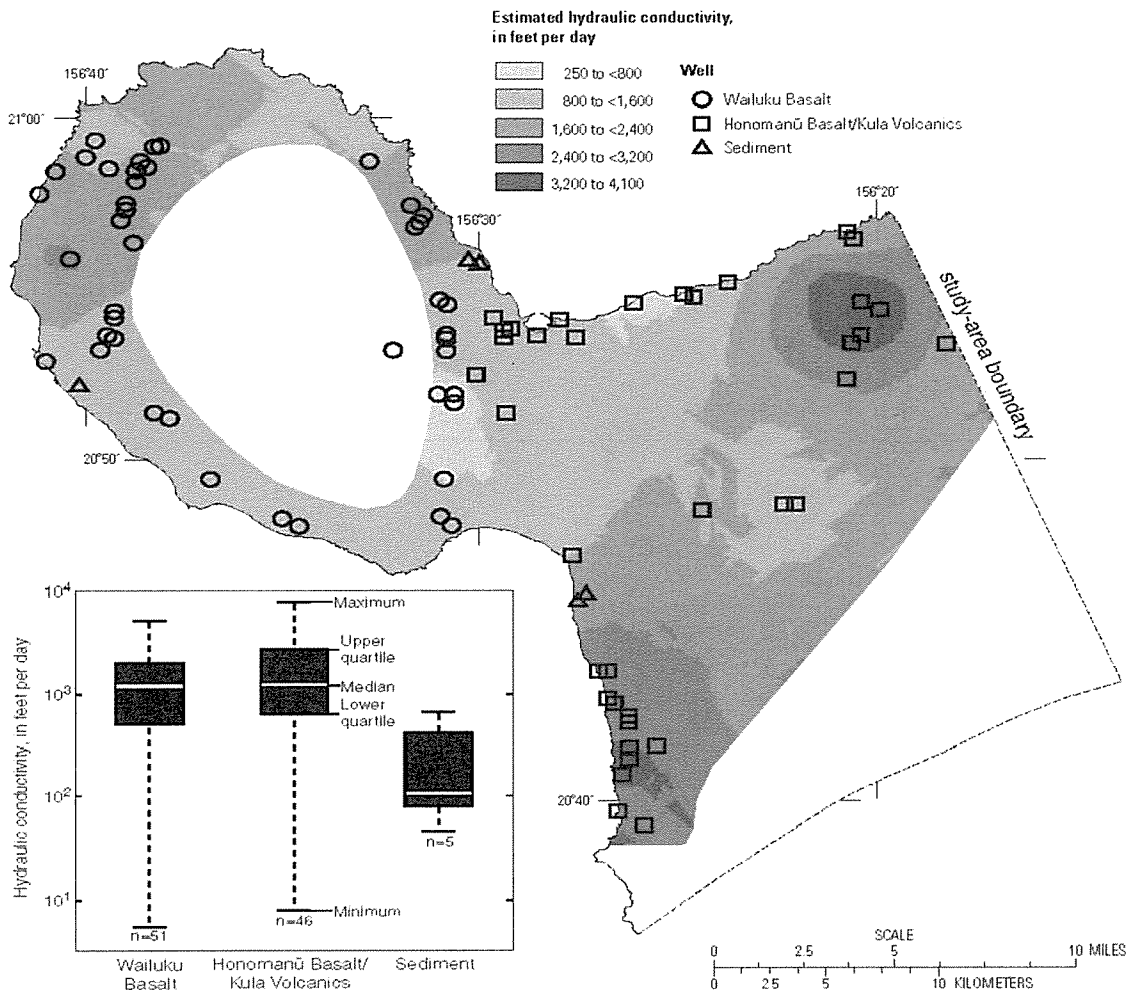


Table 1. Existing interim IFS for surface water hydrologic units in the Lahaina Aquifer Sector. [n/a = not applicable]

surface water hydrologic unit	stream name	Q ₅₀ (mgd)	Q ₉₀ (mgd)	interim IFS (mgd)	interim IFS elevation (ft)	estimated flow available for non-instream use at Q ₅₀ (mgd)
Honokōhau	Honokōhau	19.4	11.0	n/a	825	n/a
Honolua	Honolua	2.46	0.00	n/a	750	0.0
Honokōwai	Amalu	--		n/a	1600	n/a
Honokōwai	Kapaloa	--		n/a	1560	n/a
Honokōwai	Honokōwai	3.49	2.32	n/a	1480	n/a
Kahoma	Kahoma	3.75	1.87	3.49	2100	0.26
Kahoma	Kanahā	3.17	2.65	0.50	1100	2.67
Kaua'ula	Kaua'ula	6.14	3.36	3.36	1540	2.78
Launiupoko	Launiupoko	0.30	0.23	0.00	1340	0.30
Olowalu	Olowalu	3.23	2.20	2.65	130	0.58
Ukumehame	Ukumehame	3.23	2.07	2.90	220	0.33

Table 2. Current (August 2021) 12-month moving average (MAV) reported pumpage and for aquifer systems in the Lahaina Aquifer Sector, development tunnel discharge and existing entitled/authorized planned use [million gallons per day, mgd]

System	SY (mgd)	2020 12-month MAV (mgd)	2021 12-month MAV (mgd)	maximum monthly pumpage (mgd)	development tunnel discharge (mgd)	entitled/ authorized planned use ^a (mgd)	other permitted well capacity (mgd)	total existing and authorized planned use (mgd)	percentage of SY
Ukumehame	2.0	0.034	0.049	0.045	0.00	1.080	0.000	1.42	71%
Olowalu	2.0	0.100	0.074	0.150	0.10	0.003	0.000	0.203	10%
Launiupoko	7.0	1.625	1.434	2.638	4.01	1.036	1.777	8.448	121%
Honokōwai	6.0	3.626	3.777	4.778	2.50	2.533	1.150	9.809	163%
Honolua	8.0	2.103	2.450	2.331	0.00	1.969	1.150	5.222	65%
Honokōhau	9.0	0.000	0.000	0.000	3.75	0.001	0.000	3.751	42%

Table 3. Water Use Reporting by Aquifer System Area

Aquifer System Area	Total # of Wells (including OBS and UNU)	# Wells Reporting Water Use	Compliance Rate
Ukumehame	5	4	80%
Olowalu	4	3	75%
Launiupoko	32	22	68.8%
Honokōwai	42	29	69%
Honolua	16	10	62.5%
Honokōhau	4	0	0%

Table 4. Maximum Permitted Pump Capacity by Aquifer System Area

Aquifer System Area	Maximum Pump Capacity (mgd)	SY (mgd)
Ukumehame	4.954	2
Olowalu	8.553	2
Launiupoko	42.302	7
Honokōwai	43.369	6
Honolua	7.752	8
Honokōhau	0.012	9

Figure 3. Current monthly pumpage (blue line) and 12-month moving average (green line) from the Honokowai Aquifer System, including ground water development tunnel discharge, in million gallons per day (mgd).

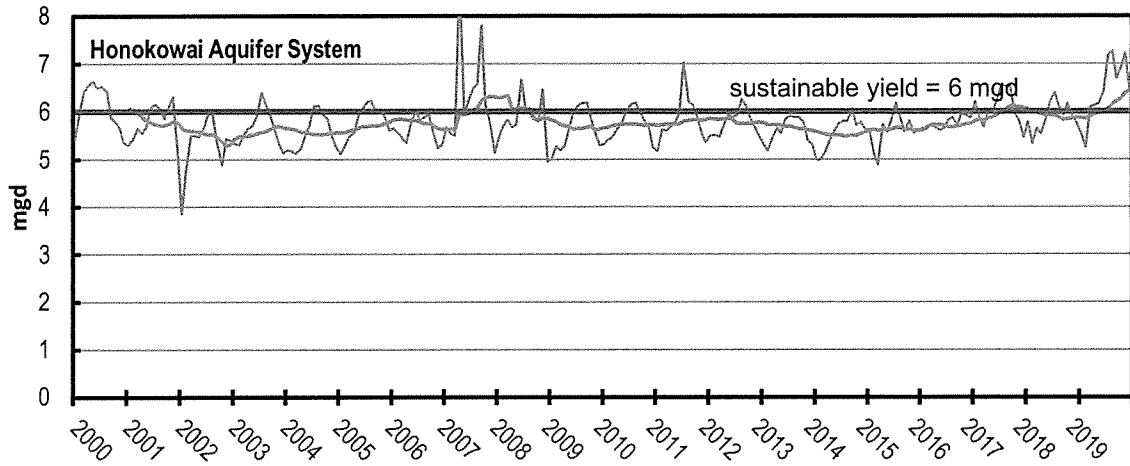
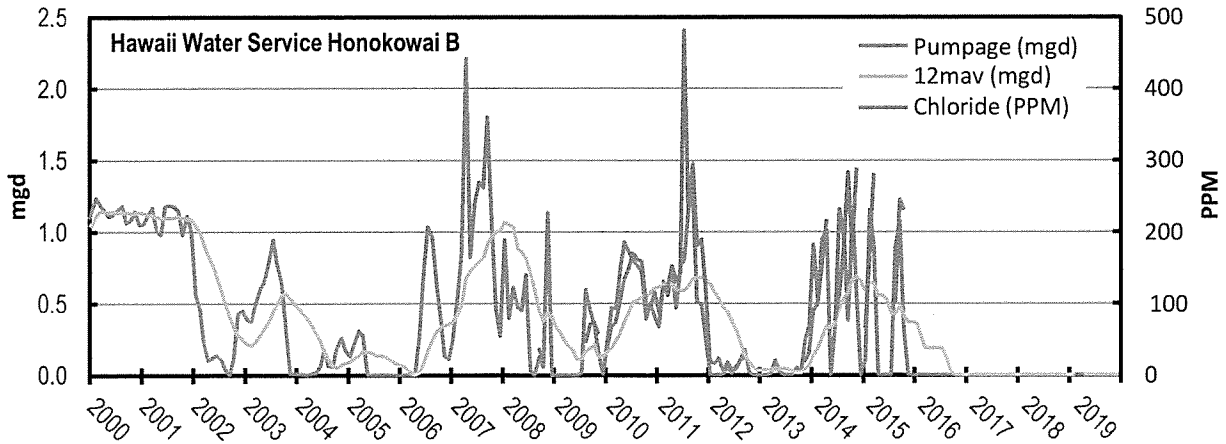


Table 5. Current (2018-2020) well applications pending completion in the Lahaina Aquifer Sector.

Aquifer System	Well Name	Well Number	Proposed Pump Capacity (mgd)	Proposed Daily Amount (mgd)
Launiupoko	Jackson Rancheria	6-5037-001	0.187	0.075
Launiupoko	Maria Lynn Moyer Memorial	6-5137-002	0.006	0.005
Launiupoko	Makila Kai	6-5138-002	0.504	0.150
Launiupoko	Rogers	6-5139-004	--	--
Launiupoko	Kui'a Estate	6-5239-001	0.360	0.270
Launiupoko	LIC 1B	6-5139-005	0.720	0.700
total			1.777	1.200

Figure 4. Monthly pumpage (mgd), 12-month moving average (12MAV) and chloride (ppm) for Honokōwai B (5638-003), operated by Hawaii Water Service, West Maui.



156°45'0"W

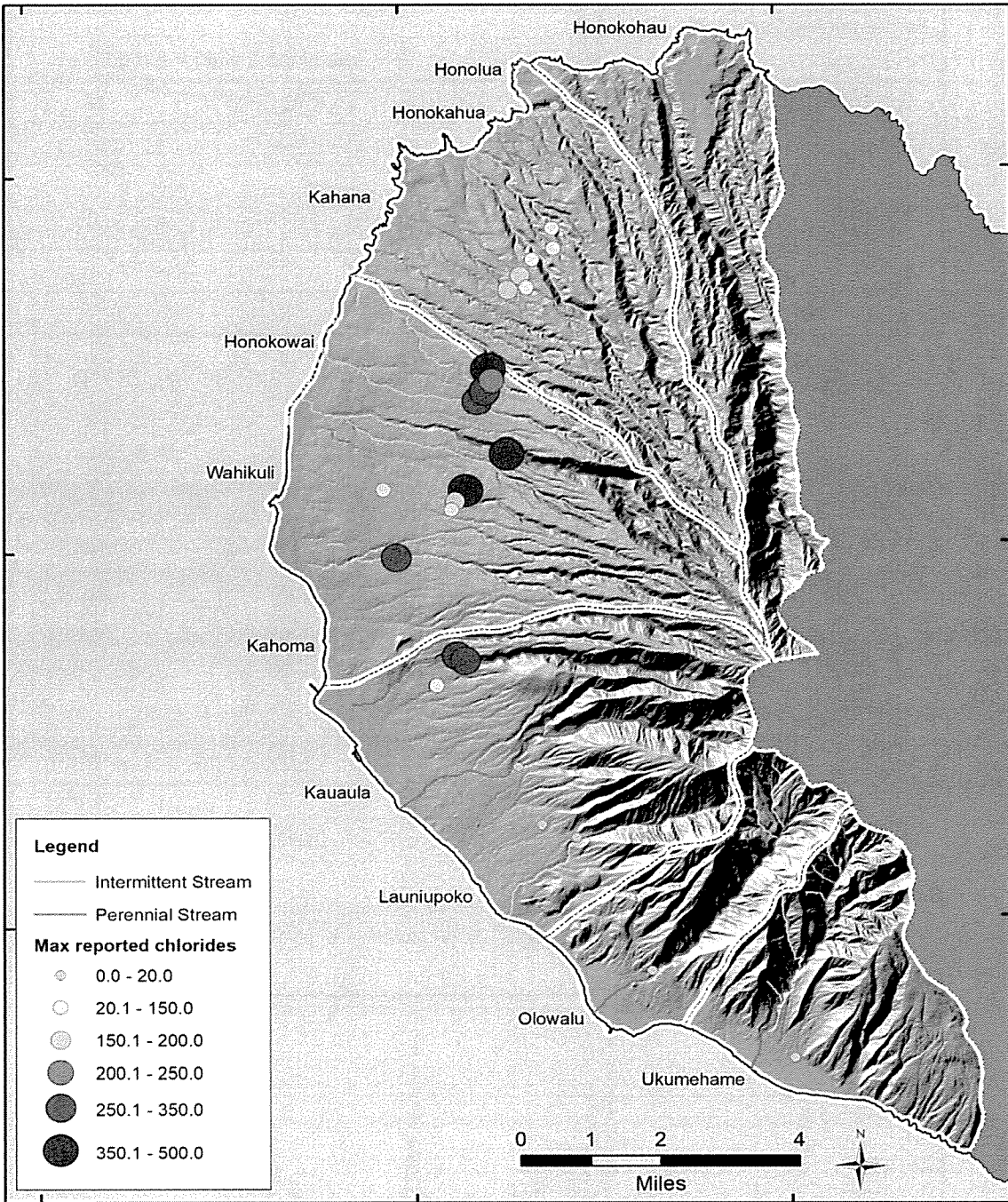
156°40'0"W

156°35'0"W

21°0'0"N

20°55'0"N

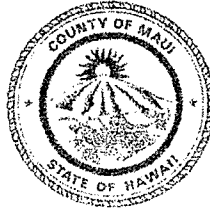
20°50'0"N



MICHAEL P. VICTORINO
Mayor

JEFFREY T. PEARSON, P.E.
Director

HELENE KAU
Deputy Director



DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793
www.mauicounty.gov/water

December 28, 2021

Mr. M. Kaleo Manuel, Deputy Director
State of Hawaii Department of Land and Natural Resources
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809

RECEIVED
COMMISSION ON WATER
RESOURCE MANAGEMENT
2022 JAN -4 AM 10:57

SUBJECT: Consultation on Chairperson's Recommendation to Designate the Lahaina Aquifer Sector, Maui as Surface Water and Ground Water Management Area

Aloha Deputy Director Manuel,

Thank you for the opportunity to comment on your recommendation to initiate the designation process of the entire Lahaina Aquifer Sector on Maui. We note that selected data was provided in your December 17, 2021 response to Maui County Council Chair Lee's request for information. We look forward to the technical analyses that triggered this initiative. Meanwhile, we provide preliminary comments below.

Threats to water resources by existing and proposed withdrawals:

Table 2 in your December 17, 2021 letter appears to double count tunnel discharge in Launiupoko and Honokowai as both against basal sustainable yield, as calculated in the 2019 Water Resources Protection Plan, and as dike source to basal recharge. Your calculations in Table 2 are not consistent with how high-level tunnel sources are accounted for against basal sustainable yield in the Lao Groundwater Management Area designation and confirmed in the Na Wai Eha contested case.

Reported pumpage of Honokowai aquifer, as provided by the Commission on Water Resource Management (CWRM) to the Maui County Department of Water Supply (MOWS) represents about 67% of sustainable yield. We project that unreported and varying pumpage, future groundwater needs to offset non-potable uses of Honokowai Stream along with issued groundwater reservation

((r.B!J 'Water flll rrlings !Find Life"

for the Department of Hawaiian Homelands **may** exceed established sustainable yield. Factors that influence projections include assumptions about Interim Instream Flow Standards, yet to be established for Honokowai stream, water duty for agricultural irrigation needs, expansion of recycled water availability, conservation measures implemented by private water purveyors and implementation of the policies and strategies proposed in the Draft Maui Island Water Use and Development Plan (WUDP), as well as the West Maui Community Plan update.

CWRM has consulted with the MDWS and the Maui County Planning Department on interpreting demand projections and Authorized Planned Use (APU), as defined in the State Water Code. We find that current groundwater use and APU does not reach 90% of sustainable yield for any other aquifer system than Honokowai. Tentatively, MDWS supports investigations to consider designation of **Honokowai Aquifer System** only.

Serious disputes over current and planned water uses:

The Draft WUDP is the culmination of a 3 year long public process, followed by public hearings conducted by the Board of Water Supply, and deliberations over 2 ½ years in council committees. In 2021, council committee chair Sinenci conducted additional consultations with the 'Aha Moku Councils to ensure culturally generational Kanaka Maoli perspectives were incorporated. The plan's strategies offer compromises to address community concerns and disputes, align with the General Plan and Community Plan for the Lahaina region to allocate water to planned land use. In their review of WUDP strategies, CWRM staff noted the benefit of strategies to meet future needs, including transfers from adjacent aquifers, to help guide CWRM in future decision-making on water management area designation.

The WUDP is the tool to allocate water to land use in consistency with the water resource protection policies set forth under the overall Hawaii Water Plan Framework. The Maui County Planning Department worked closely with MDWS in their update of the West Maui Community Plan and incorporated proposed WUDP strategies into the community plan. CWRM was consulted with regards to water policies and implementing actions. Both planning documents have included rigorous community scrutiny and CWRM had ample opportunity to provide guidance in the planning process and address any serious disputes over current and planned water uses. The current initiative to designate the entire aquifer sector seriously undermines the enormous effort to engage the community, private purveyors and sister county agencies and the progress in land use and water planning integration the county agencies have achieved to date.

Harm to groundwater quantity and quality by saltwater intrusion and climate uncertainty:

MDWS has funded multiple cooperative studies with the U.S Geological Survey (USGS) to guide

("By 'Water .9L[[Iliings :find Life"


resource management for Central Maui and Lahaina regions that specifically address threats to water quantity and quality and climate change impacts. These tools underpin the proposed WUDP strategies to allocate water to land use, guide sustainable groundwater pumpage, address declining rainfall and climate uncertainty. Specifically, distribute pumpage throughout Launiupoko aquifer where increased pumpage in MDWS wells result in high chloride levels. Current well exploration in Launiupoko aquifer is guided by the 2012 USGS study on groundwater availability in the Lahaina district. MDWS is actively preparing to shift to groundwater to reduce reliance on surface water long term and to provide for planned growth of the Lahaina community. Sustainable well development should consider optimal withdrawals of a groundwater unit and the interaction with surface water.

We believe that proactive guidance by CWRM to interpret and utilize available groundwater models and monitoring data to ensure adequate pump distributions are arguably better tools to enhanced and integrated management, than designation.

There are clearly aquifer systems included in this initiative with no basis for designation as set forth in the State Water Code. MDWS does **not** support designation of the entire aquifer sector. We believe a better approach is proactive collaboration between CWRM, public and private purveyors and community representatives to ensure implementation of WUDP strategies as well as resource management policies established in the WRPP. We expect the WUDP to be before CWRM in the first quarter of 2022. At a minimum, CWRM staff and commissioners should have the opportunity to review the WUDP in lieu of the designation process.

Designation of a Surface Water Management Area (SWMA) is premature and also inconsistent with the WUDP. We believe CWRM's ability to enforce IIFS is at the heart of the problem, a concern that is echoed by the community. At the same time, IIFS decisions must be flexible enough to adapt to the obstacles and time it takes water supply purveyors to transition to practicable alternatives. MDWS respectfully requests CWRM to **defer** SWMA proceedings until IIFS can be adopted for other priority streams, including all diverted streams in East Maui and until CWRM can secure adequate staffing to monitor and enforce decisions.

Sincerely,



Jeffrey T. Pearson, P.E.
Director of Water Supply

("By Water #L[%ings :Find Life"



HAWAII WATER SERVICE

P.O. Box 384809
Waikoloa, HI 96738 *Tel:* (877) 886-7784 toll-free

Email: kaleo.l.manuel@hawaii.gov
tom@tnwre.com

February 9, 2022

Mr. M. Kaleo Manuel – Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Manuel:

Intention to Designate the Lahaina Aquifer Sector
as a Surface and Groundwater Management Area

Hawaii Water Service Company (Hawaii Water) has prepared this response to the Commission on Water Resource Management's (CWRM) intention to designate the Lahaina Aquifer Sector as a Surface and Groundwater Management Area. The Staff Submittal presented at the Commission's January 18, 2022 meeting provides the basis for CWRM's intention to designate.

Hawaii Water's interest in the potential designation is substantial. It is the owner and operator of the KaaNapali Water System which has nine (9) wells in the Honokowai Aquifer System. It is the owner and operator of the Kapalua Water System in the Honolua Aquifer System. It also has a contract with Maui Land & Pineapple Company to operate and maintain the Honokohau Ditch System which originates in the Honokohau Aquifer System.

Questions and Comments on the Basis of Designation as Presented in the Staff Submittal

As a general comment, information in the Staff Submittal is limited to a summary of existing and projected water use amounts. It does not provide the backup data which would allow Hawaii Water or any other interested party to be able to verify the validity of the summary numbers presented. For example, Table 2 on page 7 of the Staff Submittal. Hawaii Water would like the following information supporting the groundwater amounts in the table to be made public, including:

- Actual measurement data of the tunnel discharge rates, including how many measurements were made, the dates of these measurements, and how the time-varying rates of discharge were accounted for.





HAWAII WATER SERVICE

- A list of wells and their respective potential uses which comprise the “entitled / authorized planned use” for each Aquifer System.
- A list of wells and uses which comprise “other permitted well capacity” and a justification of their inclusion in the comparison of each aquifer system’s existing and planned pumpage versus its sustainable yield.
- We believe that the “other permitted well capacity” is not a justifiable inclusion in the basis for designation. If it is not included, only the Honokowai Aquifer system exceeds the 90 percent criterion for designation, making designation of the other five (5) aquifer systems without an actual basis to do so.

In the Staff Submittal’s sections on the Honokowai and Launiupoko Aquifer it is stated that withdrawals from either of these aquifers “...will most likely affect neighboring aquifers.” This generalization, made without actual supporting field data, is the only justification for including the other five (5) aquifer systems that do not otherwise meet any of the criteria for designation. Please provide any actual field evidence that supports this rather broad generalization regarding the contrasting permeabilities. We are of the opinion that the extent of this possibility is a very modest impact at best.

CWRM has one (1) monitor well in the Lahaina Aquifer Sector. It is the Mahinahina Deep Monitoring Well (DMW), identified as State No. 5739-003 and located in the Honokowai Aquifer System. The narrative description on page 9 of the Staff Submittal indicates that measurements since 2013 indicate that the Aquifer System has been quite stable. On Figure 6 on page 11 of the Staff Submittal, it states that the water table has risen 0.49 feet since August 2001, although it is not known if this has been corrected for sea level rise over the same period. Regardless, the actual data provided by the DMW does not portray an aquifer that has been degraded over the eight-year period since 2013. This contradicts a number of generalizations to the contrary throughout the Staff Submittal.

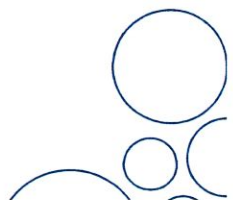
The time required for the designation process to be completed will delay Hawaii Water from moving forward with needed new sources of supply. This delay is also likely to translate into significant additional costs. For that reason, Hawaii Water is requesting that a complete disclosure of the basis of the summary amounts presented in the Staff Submittal be made available for review by all impacted parties prior to scheduling a public hearing or moving forward on the process for designation.

Sincerely,

A handwritten signature in blue ink, appearing to read "Cathy Lane".

Hawaii Water Service, General Manager

Email Copy: Tom Nance – TNWRE Inc.



From: [Koa 'Ohana](#)
To: [Hyatt, RaeAnn P;](#) cwrm.dlnr@hawaii.gov
Subject: [EXTERNAL] CWRM 2/15/22 agenda item B-4
Date: Friday, February 11, 2022 1:17:32 PM

Commission on Water Resource Management
State of Hawai'i Department of Land and Natural Resources
Kalanimoku Building
1151 Punchbowl Street, Room 227
Honolulu, Hawai'i 96813
Email: dlnr.cwrm@hawaii.gov

RE: Agenda Item #B4, Accept Chair's Recommendation to Designate the Lahaina Aquifer Sector, Maui as a Surface Water and Ground Water Management Area under HRS § 174C-41, and to Notice and Hold a Public Hearing

Aloha Chair Case and Water Commissioners,

As a resident of Lāhainā, mahalo for this opportunity to testify in support of the Chair's recommendation to designate the entire Lāhainā Aquifer Sector as a surface water and ground water management area. For some time now, we have been experiencing drought and related impacts, including declines in stream flow. As we prepare for our new climate reality, we believe that dual designation, and the water use permitting that goes with it, are the best tools to address these challenges.

Our Water Code requires designation when resources "may be threatened by existing or proposed withdrawals" of water. HRS § 174C-41(a). As a resident of Lāhainā, I believe that "regulation is necessary to preserve diminishing groundwater supply for future needs." HRS. § 174C-44(3).

Your well-researched staff submittal highlights many of the water challenges our community is facing, including water harm to ground water quantity and quality by saltwater intrusion, climate uncertainty due to prolonged drought and declining rainfall, as well as the connection between ground and surface water resources. More numeric IIFSs have encouraged new well construction. The County's Department of Water Supply has not notified you of the new wells they have been planning in areas of severe water conflict. In designated areas, you are better able to manage well placement to protect the long-term health of our precious ground water. And perhaps most importantly, our public trust doctrine requires preservation of Kānaka Maoli cultural practices but these practices have been harmed and will continue to be harmed without additional protective action by this Commission. The ability of Maui Komohana to maintain ancestral traditions and lifeways is at risk.

For example, there are major conflicts over water use in our community, which makes designation necessary for pono management of our resources. We cannot continue to have kalo farmers, whose water use is a protected public trust purpose, receiving their water at the mercy of plantation water systems and the developers who currently operate them. Competition over declining water resources in our area has already led to conflicts over water, and we only expect that to get worse. The Water Code proclaims that designation is appropriate where "serious disputes respecting the use of surface water resources are occurring." HRS §174C-45. Serious disputes are occurring in our community right now and we appreciate that your submittal confirms that.

Not all current uses of water are beneficial. Designation would help your Commission balance requests for water and ensure that public trust purposes, such as water for kalo, have priority. Without adequate water, our lāhui are unable to continue Kānaka Maoli practices that define who Kānaka are as a people and that made Lāhainā the "Venice of the Pacific." It is important to secure our water future now for the generations to come. We believe that State designation is the best tool to address these and other issues our community faces because without designation, the County has proven it cannot manage the wai and Maui Department of Water Supply has recently admitted to the county water board that the County is in the "position of begging" private corporations/landowners for help. Some of those private entities are culpable for water violations and have initiated aggressive conflicts with kuleana families with appurtenant water rights. This situation and the County's conflicted position is untenable.

Under the Hawai'i Supreme Court's ruling in Waiāhole, "the lack of full scientific certainty should not be a basis for postponing effective measures to prevent environmental degradation" and "where [scientific] uncertainty exists, a trustee's duty to protect the resource mitigates in favor of choosing presumptions that also protect the resource." We do not believe uncertainty exists, but even if you do, please vote today to move forward with the designation process.

Mahalo for this opportunity to testify, for considering my concerns, and for fulfilling your kuleana as a steward of our public trust by proactively protecting our resources.

Mahalo nui loa,

Fay McFarlane
Lahaina, HI 96761

From: [Uilani Kapu](#)
To: [Hyatt, RaeAnn P](#); [DLNR.CW.DLNRCWRM](#)
Subject: [EXTERNAL] Agenda item#B4
Date: Saturday, February 12, 2022 6:38:26 PM

Commission on Water Resource Management State of Hawaii Department of Land and Natural Resource
Kalanimoku Building
1151 Punchbowl St. Room 227
Honolulu, Hawai'i 96813

Re: Agenda item #B4, Accept, Chairs Recommendation to Designate the Lahaina Aquifer Sector, Maui as a Surface Water and Ground Water Management Area under HRS174 C-41, and to Notice and Hold A Public Hearing

Aloha Chair Case and Water Commission,

I am a resident of Lahaina and Support the Designation of Lahaina Aquifer Sector, Maui as a Surface Water and Ground Water Management Area under HRS 174 C-41. I reside in this Designated area called Kaua'ula Valley above our sacred island Moku'ula (Mokuhinia).

This Lahaina region has experienced steadily decreasing rainfall and stream flow in recent years. Designation and the permitting requirements that accompany it, are critical to address these and other Water availability issues brought on by climate change.

The ground and surface Water Resources are connected and should be managed together to ensure sustainability. Designation is necessary to protect and restore traditional and customary Native Hawaiian Rights and practices including Kalo cultivation and just to let you know we are kalo farmers. Our water runs through the sacred Island Mokuhinia which will never ever happen, if our Water is not managed right.

I have been to Waiahole Waikane and Na Wai Eha, so I know how beneficial it is for this Management and ask this commission to please, Designate the Lahaina Aquifer Sector.

A wise Kupuna once said ligure is for drinking and water is for fighting! Here I am standing for our Public Trust Water Use.

The studies have been done and the people have shared, Climate Change is Here!

Mahalo nui
Uilani Kapu



Sent from my iPhone

From: [Ke'eaumoku Kapu](#)
To: [Hyatt, RaeAnn P](#)
Subject: [EXTERNAL] Surface and ground water designation. Agenda Item #B-4
Date: Sunday, February 13, 2022 10:29:28 PM

Commission on Water Resource Management
State of Hawaii Department of Land and Natural Resources.
Kalanimoku Building
1151 Punchbowl Street Rm 227
Honolulu Hawaii 96813

Re: Agenda Item #B-4 Accept Chairs Recommendation to Designate the Lahaina Aquifer Sector, Maui as a surface Water and groundwater management area under HRS 174-C-42, and to Noticeand hold a public meeting.

Aloha Chair Case and water commission.

My Name is Ke'eaumoku Kapu and i am a resident of Lahaina and resides in the valley of Kaua'ula on Kuleana parcels LCA 6507 Royal patent 3457 apana 1 and LCA 4878-O RP 2664 apanas 1, 2, and 3. LCA 581 RP 8933 apana 3. LCA 6931 RP 1856. LCA 4878 Q RP 1775 within TMK 4-6-21: parcels 004, 005, 006, 012, 015 and 016.

Exactly what is before you today. To accept the chair's recommendations to designate the aquatic Sector. Maui as a surface and groundwater management area under HRS 174-C-42,

We have waited 20 plus years to hear this recommendation. It took our ohana over 20 plus years to prove in court they did not own any of those lands they are using for collateral damages.

I remember 20 plus years ago we went to Earth Justice and met Kapua Sprout for the first time to do a site visit with us kuleana up Kaua'ula valley thinking maybe can kokua with our water challenges? Nope because Lahaina was not a water management area and couldn't do anything for us kuleana. (Never knew what that meant until today).

To try and find a balance of an old water system on the verge of total collapse and to oversee a true management on how water should be evenly distributed and to oversee how our public resources are being misused. Deals have been struck with foreign investments for shady developments, even our county government should support this recommendation instead coping deals thru crooked municipalities. We've seen too many market rated Luxury homes and gated communities get rubber stamped and are allowed exemptions to lay miles and miles of pipeline so they can divert our precious resources to proposed ranch lots?

I remember we fought long and hard for the IFFS thought it was god's gift to the aina. Got plenty of resistance from these same land companies. Still get pilikia not getting the recommended In stream required by law. Still diverting %100 We know! We live right next to the hydro plant. They spent millions to try and self-serve their pumps and it never worked. This designation needs to happen.

I would like to ask if the commission was given notice of a potential well soon to be drilled by the county water department below our valley lower Kaua'ula about 100 yards less away from

our stream. escorted by LIC/LWC the engineers who will be doing this well and we were only given notice the day before the site visit which also was in the planning since early January.

For too long we have to sit idle for anything to be done about our livelihood and need for water sometimes with no water for days to bathe our babies in buckets. The biggest nightmare is our kalo getting pocket rot because no intake management and cleanup sometimes for months. We clean when we need to as we always have for generations during my great kupunas and to my fathers time then me to my son now getting threatened that we are tampering with their system? since when our public trust became theirs. (the PUC). They should be glad to get us kuleana that knows this system way before they even purchased this intake. So we no longer touch for fear of more complaints against my ohana now we call there water manager to get their asses up here and fix it. funny if the rate payers are not grumbling then no need to worry but we got to wait.

By way of this designation our community, True farmers, Kuleana and Kalo growers has a chance to thrive. We suffered enough. Please Pass agenda item #B-4

Mahalo for allowing me to testify.

Ke'eaumoku Kapu (pelekekena)
Na'aikane o Maui Inc.

██████████
Lahaina Hawaii 96761
Ph. (808) ██████████

VIA EMAIL TRANSMITTAL

Commission on Water Resource Management
State of Hawai‘i Department of Land and Natural Resources
Kalanimoku Building
1151 Punchbowl Street, Room 227
Honolulu, Hawai‘i 96813
Email: dlnr.cwrm@hawaii.gov

**Re: Agenda Item B4, Designation of the Lahaina Aquifer Sector,
Maui as a Surface Water and Ground Water Management Area**

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

Mahalo nui for the opportunity to testify in strong support of designation of the Lahaina Aquifer as a Surface Water and Ground Water Management Area under Hawai‘i Revised Statutes § 174C-41. My name is MJ Palau-McDonald, and I’ve had the great privilege of working with community members from Lahaina who are directly impacted by your decision.

As a Native Hawaiian, I’m grateful that the people of Hawai‘i chose to steward our freshwater resources as a Public Trust for present and future generations and empowered your Commission with tools—like water management area designation—to do so. As a law student, however, I’m disheartened when county agencies, such as the Maui Department of Water Supply (“MDWS”), forget basic trust principles under Article XI, Sections 1 and 7 of Hawai‘i’s Constitution. Specifically, MDWS’ disregard for the precautionary principle is deeply concerning.

As you know, the Hawai‘i Supreme Court in *In re Waiāhole Ditch Combined Contested Case* (“*Waiāhole*”), 94 Hawai‘i 97, 154–55, 9 P.3d 409, 446–67 (2000), adopted the precautionary principle as a corollary to the Public Trust, which your Commission and MDWS manage as trustees. At bottom, the precautionary principle mandates that “where [scientific] uncertainty exists, a trustee’s duty to protect the resource mitigates in favor of choosing presumptions that also protect the resource.” *Id.* at 154, 9 P.3d at 466. In other words, if the science is unclear, the trustee must favor resource protection. The court further explained that, “at minimum, the absence of firm scientific proof should not tie the Commission’s hands in adopting reasonable measures designed to further the public interest.” *Id.* at 155, 9 P.3d at 467. Put simply, your Commission *does not* have to produce data affirmatively showing harm to freshwater resources to designate.

Notwithstanding these basic principles, MDWS argued in its written and oral testimony at the January 18, 2022 Commission Meeting that the absence of scientific certainty regarding whether pumpage from the Honokōwai aquifer sector would exceed the sustainable yield rendered designation premature. This belies the precautionary principle. The law is clear: a

trustee cannot hide behind scientific uncertainty, and doing so is an unconstitutional violation of Hawai‘i’s Public Trust. Designating the Lahaina Aquifer sector as a Surface Water and Ground Water Management Area is not only consistent with, but also likely required by, the precautionary principle and other Public Trust provisions given your Commission’s findings.

MDWS’ argument that it can address and remediate disputes over current and planned water uses by itself is similarly without merit. If MDWS has the power to protect and preserve Maui’s freshwater resources, why has it not yet done so? In truth, only your Commission has the power to set and enforce interim instream flow standards and sustainable yields. Though MDWS claims that its newly promulgated Maui Island Water Use and Development Plan (“WUDP”) incorporates Native Hawaiian perspectives, it fails to operationalize these perspectives in practice. Instead, the WUDP cloaks status quo subjugation of traditional and customary Native Hawaiian rights and biocultural resources in flowery—but legally unenforceable—policy statements. Native Hawaiian community members throughout Maui Komohana remain cut off from freshwater resources, despite the fact that their traditional and customary practices, appurtenant rights, and domestic water uses are protected Public Trust purposes. *See Waiāhole*, 94 Hawai‘i at 136–38, 142, 9 P.3d at 448–50, 454. Meanwhile, corporate developers, agribusiness, and MDWS continue to reap the benefits of the status quo, despite their non-instream commercial and municipal uses incurring no heightened protections under Hawai‘i law.

At the 1978 Constitutional Convention, the framers of Hawai‘i’s Public Trust envisioned your agency having “not only the power to protect the resources but the *responsibility to do so long before any crisis develops.*” Standing Comm. Rep. No. 77, in 1 PROCEEDINGS OF THE CONSTITUTIONAL CONVENTION OF HAWAII OF 1978, at 688 (1980) (emphasis added). We’re quickly approaching a crisis. As USGS researchers presented at the January 18th Commission Meeting, Maui Komohana’s freshwater resources will only grow scarcer as climate impacts worsen, creating a dire situation if proactive steps are not taken now. Designation provides for an integrated approach to surface- and groundwater management that will more equitably distribute freshwater resources and enable your Commission to proactively plan for the future.

In pursuing designation, you’re not only fulfilling your fiduciary duty under our Public Trust, but also embodying your role as ke Kahuwai Pono. Please vote to designate today.

Mahalo,

MJ Palau-McDonald

E: [REDACTED]

Pā'anaakalā Tanaka
[REDACTED]
Lahaina, Hawai'i 96761
email: [REDACTED]

Commission on Water Resource Management
State of Hawai'i Department of Land and Natural Resources
Kalanimoku Building
1151 Punchbowl Street, Room 227
Honolulu, Hawai'i 96813
Email: dlnc.cwrn@hawaii.gov

RE: Agenda Item #B4, Accept Chair's Recommendation to Designate the Lahaina Aquifer Sector, Maui as a Surface Water and Ground Water Management Area under HRS § 174C-41, and to Notice and Hold a Public Hearing

Ke aloha nō e Chair Case and Water Commissioners:

As a resident of Lahaina and one of the 'ohana that are restoring lo'i kalo on kuleana land, mahalo for this opportunity to testify in support of the Chair's recommendation to designate the Lahaina Aquifer Sector as a surface water and ground water management area. For some time now, we have been experiencing drought and related impacts, including declines in stream flow. As we prepare for our new climate reality, we believe that designation, and the water use permitting that goes with it, are the best tools to address these challenges.

Our Water Code requires designation when resources "may be threatened by existing or proposed withdrawals" of water. HRS § 174C-41(a). As a resident of Lahaina and kalo farmer in Kahoma Valley that depends on Kahoma stream, I believe that "regulation is necessary to preserve our diminishing ground water supply for future needs." HRS. § 174C-44(3).

Your staff submittal highlights many of the water challenges our community is facing, including harm to ground water quantity and quality by saltwater intrusion, climate uncertainty due to prolonged drought and declining rainfall, as well as the connection between ground and surface water resources. More numeric IIFSs have encouraged new well construction. In designated areas, you are better able to manage well placement to protect the long-term health of our precious ground water. And perhaps most importantly, our Native Hawaiian cultural practices have and will continue to be harmed without additional protective action by this Commission. Our ability to maintain our traditions and lifeways is at risk.

For example, there are major conflicts over water use in our community, which makes designation necessary for pono management of our resources. We cannot continue to have kalo farmers, whose water use is a protected public trust purpose, receiving their water at the mercy of plantation water systems and the developers who currently operate them. Competition over declining water resources in our area has already led to conflicts over water, and we only expect that to get worse. The Water Code proclaims that designation is appropriate where "serious

disputes respecting the use of surface water resources are occurring.” HRS §174C-45. Serious disputes are occurring in our community right now and your submittal confirms that.

Designation would help your Commission balance requests for water and ensure that public trust purposes, such as water for kalo, have priority. I have keiki that are also farming kalo alongside us on kuleana land. It is because of wai (water) from Kahoma stream that we are able to maintain this practice that is vital to our identity as Hawaiians. Without the water we have no kalo (taro), we lose that ‘ai (food) that feeds us physically and connects us spiritually to our Native Hawaiian ancestors. Designation is necessary to ensure any hope for the future that my children and their descendants will always be able to sustain those connections. We believe that designation is the best tool to address these and other issues our community faces

Under the Hawai‘i Supreme Court’s ruling in *Waiāhole*, “the lack of full scientific certainty should not be a basis for postponing effective measures to prevent environmental degradation” and “where [scientific] uncertainty exists, a trustee’s duty to protect the resource mitigates in favor of choosing presumptions that also protect the resource.” We do not believe uncertainty exists, but even if you do, please vote today to move forward with the designation process.

Mahalo for this opportunity to testify, for considering my concerns, and for fulfilling your kuleana as a steward of our public trust by proactively protecting our resources.

Na‘u me ka ‘oia‘i‘o,
Pā‘anaakalā Tanaka

Aloha, my name is Lauren Palakiko, I'm am a resident of Kaua'ula valley. I am born and raised across the street from Shark pit, which happens to be where the muliwai (stream outlet) for Kaua'ula flows, so this place has always been a concern for me, much more now that I am the wife of a kalo farmer here.

Mauka to makai connectivity is imperative to our native ecosystem. However, even with a break in connectivity between the dam and siphon, Kaua'ula stream was filled with life; 'o'opu, 'opae, prawns and more. There was enough water coming down the muliwai that the GM of Puamana had cultivated a lo'i!

The IIFS was mandated on March 20, 2018, however I don't believe there was ever a time when the LIC had released the mandated 3.36mgd. In fact, we have only seen the amount of water in the river decline since then.

On June 6, 2019 our muliwai dried up for the first time that I can remember. Besides after rain storms, it has not ran since then. A week later the muliwai was an 'o'opu graveyard. I had noticed the drop in water occurred after LIC installed a few big blue pumps down the road. Although I can't prove these pumps led to the muliwai drying up, I thought it was worth noting that the day after they removed these pumps ("bomb shelter") on October 29, the muliwai started to trickle water again.

This past Summer was hard on the lo'i, where 1400gpm was previously extremely low, the LIC was running it at 1200. Dave Minami (LIC water manager) advised us to email Peter Martin to see if there was any changes that could be made. Peter responded with CWRM's decision was for them to give us 1000gpm. Now, we are currently being given 800. The mud in our patches are showing, the water temperature may be rising which all could lead to rot and loss of our crops.

Sometime before 2019 would have been proactive to designate Lahaina as a WMA. It is now beyond crucial for our native practices, farming and island's ecosystem to do so.

Mahalo,

Lauren Palakiko

[Charlene Rowland

Lahaina, Hawai'i 96761

email:

VIA EMAIL TRANSMITTAL

Commission on Water Resource Management
State of Hawai'i Department of Land and Natural Resources
Kalanimoku Building
1151 Punchbowl Street, Room 227
Honolulu, Hawai'i 96813
Email: dlnr.cwrn@hawaii.gov

RE: Agenda Item #B4, Accept Chair's Recommendation to Designate the Lahaina Aquifer Sector, Maui as a Surface Water and Ground Water Management Area under HRS § 174C-41, and to Notice and Hold a Public Hearing

Aloha Chair Case and Water Commissioners:

As a resident of Lahaina, mahalo for this opportunity to testify in support of the Chair's recommendation to designate the Lahaina Aquifer Sector as a surface water and ground water management area. For some time now, we have been experiencing drought and related impacts, including declines in stream flow. As we prepare for our new climate reality, we believe that designation, and the water use permitting that goes with it, are the best tools to address these challenges.

Our Water Code requires designation when resources "may be threatened by existing or proposed withdrawals" of water. HRS § 174C-41(a). As a resident of Lahaina, I believe that "regulation is necessary to preserve [my] diminishing ground water supply for future needs[.]" HRS. § 174C-44(3).

Your staff submittal highlights many of the water challenges our community is facing, including harm to ground water quantity and quality by saltwater intrusion, climate uncertainty due to prolonged drought and declining rainfall, as well as the connection between ground and surface water resources. More numeric IIFSs have encouraged new well construction. In designated areas, you are better able to manage well placement to protect the long-term health of our precious ground water. And perhaps most importantly, our Native Hawaiian cultural practices have and will continue to be harmed without additional protective action by this Commission. Our ability to maintain our traditions and lifeways is at risk.

For example, there are major conflicts over water use in our community, which makes designation necessary for pono management of our resources. We cannot continue to have kalo farmers, whose water use is a protected public trust purpose, receiving their water at the mercy of plantation water systems and the developers who currently operate them. Competition over declining water resources in our area has already led to conflicts over water, and we only expect that to get worse. The Water Code proclaims that designation is appropriate where "[s]erious

disputes respecting the use of surface water resources are occurring.” HRS §174C-45. Serious disputes are occurring in our community right now and your submittal confirms that.

Designation would help your Commission balance requests for water and ensure that public trust purposes, such as water for kalo, have priority. Without adequate water, we are unable to continue these Native Hawaiian practices that define who we are as a people and that made Lahaina the “Venice of the Pacific.” It is important to secure our water future now for the generations to come. We believe that designation is the best tool to address these and other issues our community faces.

[I also support designation because.../Other concerns I have are...]

Under the Hawai‘i Supreme Court’s ruling in *Waiāhole*, “the lack of full scientific certainty should not be a basis for postponing effective measures to prevent environmental degradation” and “where [scientific] uncertainty exists, a trustee’s duty to protect the resource mitigates in favor of choosing presumptions that also protect the resource.” We do not believe uncertainty exists, but even if you do, please vote today to move forward with the designation process.

Mahalo for this opportunity to testify, for considering my concerns, and for fulfilling your kuleana as a steward of our public trust by proactively protecting our resources.

Mahalo nui loa,
Charlene Rowland

Aloha,

I'm Charlie Palakiko, a kuleana land owner of Kaua'ula valley. My family and I have been raising kalo on this land for over 30 years. When we first restored our family patches, we fed our patches water from a hose.

Through the years, we restored our auwai and got the stream running by negotiating with West Maui Land. Since then I've seen our water drop drastically from reaching the muliwai (river mouth) to now a dry stream killing many stream life such as 'o'opu, 'opae and prawns, and also affecting our kalo patches.

As of today, water to our patches are extremely low causing dirt to show in them. I called WML and was told our water is being pinched because their water was running low. I was told the siphon was set to 800gpm which is equivalent to a little over 1mgd this is not enough and it's been getting worse.

As you can see, we are already running into problems and they're not complying to the IIFS, which I think they are suppose to be releasing 2mgd at the dam which is not being done at this time. We've been at a standstill for the last two and a half years not being able to expand because of decreasing water flow.

This is why we need to be a designated water management area. We need a third party to fairly manage the developer's water taking.

Mahalo for your time,

Charlie Palakiko

Please see attached photos of our muliwai when it dried up in June 2019 and our patches today showing dirt because the stream is so low.



20220214_100836.jpg



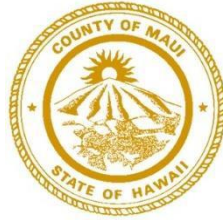
20220214_101003.jpg



Screenshot_20220214-083123_Facebook.jpg



Screenshot_20220214-083139_Facebook.jpg



BOARD OF WATER SUPPLY
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793
www.mauicounty.gov/water

February 14, 2022

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

Dear Chairwoman Case:

SUBJECT: MAUI COUNTY BOARD OF WATER SUPPLY VOTE IN SUPPORT OF DESIGNATING THE LAHAINA AQUIFER SECTOR, MAUI AS A SURFACE WATER AND GROUND WATER MANAGEMENT AREA

On January 20, 2022, the Maui County Board of Water Supply (BWS) heard testimony from Deputy Director M. Kaleo Manuel and staff regarding the proposal to designate the Lahaina Aquifer Sector as a Water Management Area for both surface and groundwater.

The BWS received testimony from descendants of Lahaina and the other areas that overlay the Lahaina Aquifer Sector. Testifiers described numerous complaints over the years about the Interim Instream Flow Standards (IIFS) not being met and agricultural uses, including kalo farming, competing with irrigation demands and of water waste.

After a presentation by Deputy Director Manuel and staff, a motion was made for the Board to support the designation and a vote was called. At the time of the vote, there were only five BWS members present. Four members were in support of the designation. As Chair, I was not in support of the motion, and expressed reservations based on the following reasons:

- CWRM has admittedly had challenges keeping up with well-reporting;
- CWRM has admittedly had challenges with monitoring and enforcing the IIFS;
- In light of the two issues above, it is questionable if CWRM has the resources and capacity available to properly manage the Lahaina Aquifer Sector; and

"By Water All Things Find Life"

- In its December 28, 2021 letter to CWRM, the County of Maui Department of Water Supply noted designation is “premature and inconsistent with our Water Use Development Plan.”

A four-to-one vote would have stalled the motion. I did not want to prevent the Board members in attendance from providing input on the matter, so I voted in favor of the motion, with my concerns clearly expressed.

Thank you for allowing me the opportunity to share this information with you.

Sincerely,



Dean K. Frampton
Chair, Maui County Board of Water Supply

cc: Mayor Michael P. Victorino
Sandy Baz, Managing Director
Jeffrey T. Pearson, Director
Helene Kau, Deputy Director

Board of Directors
Jerome Kekiwi, Jr. - President
Norman Martin, Vice-President
Earl Inouye - Treasurer
Jennifer Kekiwi-Brown - Secretary
Darryl Tau`a - Sgt at Arms
Guy Mahilani Namahoe
Radford Ka`auamo
Nichole Inouye-Nohara
Shane Tegarden



Kūpuna Council:
Edward Wendt
Carl Wendt
Terrence Akuna
Murphy Tau-a

Administrator
Mahealani Wendt

Administrative Assistant
Amanda Martin

P. O. Box 81642, Ha`iuku, Hawai`i 96708

February 15, 2022

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

Dear Chairwoman Case and Commission Members:

SUBJECT: AGENDA ITEM #B4, ACCEPT CHAIR'S RECOMMENDATION TO DESIGNATE THE LAHAINA AQUIFER SECTOR, MAUI AS A SURFACE WATER AND GROUND WATER MANAGEMENT AREA UNDER HRS § 174C-41, AND TO NOTICE AND HOLD A PUBLIC HEARING

Mahalo for the opportunity to testify in support of the Chair's recommendation in designation of the Lahaina Aquifer as a Surface Water and Ground Water Management Area.

The Lahaina region have been experiencing drought and related impacts, including declines in stream flow in recent years. Designation and the permitting requirements that accompany it, are critical to address these and other water availability issues brought on by climate change.

The ground and surface water resources are connected and should be managed together to ensure sustainability. Designation is necessary to protect and restore traditional customary Native Hawaiian Rights and practices including kalo cultivation.

I humbly ask for your support of agenda item B4. I appreciate your consideration in this matter and mahalo for your time.

Mahalo nui loa,

Jerome Kekiwi, Jr.
Jerome Kekiwi, Jr.
President