MINUTES FOR THE MEETING OF THE COMMISSION ON WATER RESOURCE MANAGEMENT

DATE: May 20, 2025 TIME: 9:00 a.m.

PLACE: DLNR Boardroom, Kalanimoku Bldg.

1151 Punchbowl Street, 1st Floor

Online via Zoom, Meeting ID: 843 1911 1540

Online link to the video recording of the May 20, 2025 Commission on Water Resource Management meeting:

Chairperson Dawn Chang called the meeting of the Commission on Water Resource Management to order at 09:05 a.m. and stated it is a hybrid meeting being held in the Kalanimoku Building boardroom, remotely via Zoom and live streamed via YouTube. It was noted that people may testify via the information provided online. Chairperson Chang reminded the public not to use the chat feature for any comments, as it presents a Sunshine Law issue. She also read the standard contested case statement, took a roll call of Commissioners, and introduced Commission staff.

The following were in attendance and/or excused:

MEMBERS: Chairperson Dawn Chang, Ms. Kathleen Ho, Dr. Aurora Kagawa-

Viviani, Mr. Wayne Katayama, Mr. Paul Meyer, Dr. Lawrence

Miike, Mrs. Hannah Springer

STAFF: Deputy Director Ciara Kahahane, Mr. Dean Uyeno, Mr. Ryan

Imata, Mrs. Katie Roth, Ms. Lyss Rousseve, Mr. Neal Fujii, Dr.

Ayron Strauch, Mr. Nick Ing, Ms. 'Iwalani Kaaa

COUNSEL: Mr. Colin Lau

OTHERS: CDR Benjamin Dunn & Ms. Meagan Ostrem – Navy Closure Task

Force Red Hill; Mr. Barry Usagawa & Mr. Dominic Dias – Honolulu Board of Water Supply, Ms. Lala Nuss – SSFM International; Dr. Jonathan Scheuer, Kahālāwai Consulting

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

20250520 00:08:45

A. APPROVAL OF MINUTES

1. March 18, 2025

PUBLIC TESTIMONY - None

20250520 00:09:37

MOTION: (MIIKE / KAGAWA-VIVIANI)

To approve minutes with non-substantive edits.

UNANIMOUSLY APPROVED

(HO/MIIKE/MEYER/KATAYAMA/CHANG/SPRINGER/KAGAWA-VIVIANI)

2. April 1, 2025

PUBLIC TESTIMONY - None

20250520 00:11:10

MOTION: (KAGAWA-VIVIANI / MEYER)

To approve minutes with non-substantive edits.

UNANIMOUSLY APPROVED

(HO/MIIKE/MEYER/KATAYAMA/CHANG/SPRINGER/KAGAWA-VIVIANI)

20250520 00:12:36

C. NON-ACTION ITEM / INFORMATIONAL BRIEFING

1. Red Hill Update May 2025 by the Navy Closure Task Force – Red Hill

PRESENTATION GIVEN BY: Meagan Ostrem & CDR Ben Dunn

QUESTIONS / COMMENTS

<u>COMMISSIONER SPRINGER</u>: Quick question, and it's probably remedial, so I thank everybody for bearing with me. How long for the analysis and response to it if an observation of contaminants is made?

<u>CDR DUNN</u>: Well, that helps inform the environmental remediation effort, which I have some slides to talk about the site assessment later. But right now, we monitor these wells or sample them twice a month, which is well above normal, and that produces a lot of data. It takes about two weeks to get that data back. So, you pull a sample, we leverage EPA-certified laboratories, and those are all on the mainland. We've got to ship the samples off and then go through the whole analysis and data validation before we see what the results are. It takes about a week and a half or two to see that. We have some presence under some of these wells, Monitoring Well 2, Monitoring Well 1, right under the tank farms, but we're not seeing any changes. We see some fluctuations, but we're not seeing movement, which again is great. We know that's an area when we get into the remediation we'll be working on.

<u>MEAGAN OSTREM</u>: Also, it's important to talk about the frequency of monitoring, even though it's twice a month. It's not all the wells are monitored those same two weeks. It's almost like a rotation. If you were to see something, because it's not like the two wells that are nearest each other, those are not being monitored exactly at the same time. They would be off schedule from each other. Do you want to kind of speak to that a little bit?

<u>CDR DUNN</u>: We sample three or four wells in a day, and we move around across the inventory of wells to collect. So over two weeks, we would get all the wells sampled.

20250520 00:22:31 – CDR Dunn resumes presentation

<u>CHAIR CHANG</u>: Can I ask you, Ben or Meagan, what's been the public's response to the notice of reactivation?

MEAGAN OSTREM: With those that are serviced by the drinking water system, we've been communicating on base, we've got our drinking water booths that continue to go out and inform individuals as to what's going on and questions, but no significant concern from our population that's on the base. We continue to communicate in a variety of ways and listen in a variety of ways, as well. We understand that we need to continue with that as we approach this milestone that's coming up, but it's very important to communicate that with those that are on the water distribution system. I would say externally, outside of those that are on the drinking water distribution system, lots of questions regarding the details associated with starting these wells back up in connection to the system, but not opposition. We're in this education phase right now. It was a point of discussion at the last CRI meeting that was held.

<u>CDR DUNN</u>: A lot of questions. There's some interest, of course, concerning to bring this back online. Obviously we're going to do it right and we want to make sure and communicate that we're doing that, communicate what we're doing frequently. We've had a lot of messaging and we will continue to message and provide public notice,

provide a press release when we get closer to doing so. Externally, yes, we've got a lot of questions, but as Megan mentioned, a lot of it's kind of the science piece. Hey, how do you know this works, etc.

MEAGAN OSTREM: The education too, about what these treatment systems are because while they are used throughout the state, it's not everywhere. It's a big education piece, especially with the GAC, granulated activated carbon. What is that? In our Red Hill Highlights that we push out pretty widely to the community and other stakeholders and via our website, our app, just trying to give little snippets of information, so not have it be as overwhelming with like giant fact sheets and tirades of essays, but little bits of information where people can go and easily obtain that information. Then trying to directly engage with people too, so that they can ask their questions, get those questions answered. That's why those webinars have been really helpful. The webinar is recorded and is on our website and available for people to watch. Then our open house, we have our open house tomorrow. We're hoping to have more people come out to the open house. Ben will be there, people from his team will be there and we have posters, we'll be able to continue that conversation with people. We really feel like it's a frequency and diversity of communication methods, so that we can meet people where they're at.

<u>CHAIR CHANG</u>: Are you going to be doing any monitoring or testing of residential homes prior to deactivation and then post reactivation, just to confirm?

<u>CDR DUNN</u>: We have. We've completed the extended drinking water monitoring, like the enhanced monitoring that's really focused on field constituents. The whole time we've been doing the normal compliance monitoring and we'll continue to do that. Part of the approval that we anticipate is based on the results from our pilot study for the treatment system, which is effective. If there are any conditions or any enhanced monitoring or post reactivation monitoring that the Department of Health would be keen to see us conduct after the fact. It's not typical to sample homes in a drinking water system. We have certainly during the enhanced monitoring efforts, but we will be doing close monitoring of this well, certainly.

<u>COMMISSIONER HO</u>: As part of the Department of Health's conditional approval, we're asking for inline monitoring system design. Would you describe a little bit about what that's supposed to monitor? And then the second thing I wanted to talk about was in the pilot study, you mentioned that the GAC system was going to filter out PFAS. Is there anything else that it's going to filter out?

<u>CDR DUNN</u>: Certainly. For the first item inline analyzers, so it's part of the Red Hill Shaft reactivation. Part of the criteria is putting in a mechanism to do some real time monitoring of fuel constituents at the treatment system, at that drinking water source. At Navy 'Aiea-Hālawa Shaft, there's no history of fuel contamination. Actually, for Red Hill Shaft, recently there hasn't been either. It's part of the Red Hill Shaft, that's part of the

treatment system configuration then the commissioning of that, and then thereafter, when it is operated, there is some hydrocarbon monitoring that is not typical to a drinking water system. We're looking at different units to install into the system that are reliable for Red Hill Shaft. So, for Navy 'Aiea-Hālawa Shaft, granular activated carbon is a proven and reliable technology to address PFAS. There's a lot of PFAS compounds, but what's understood to be shorter chain PFAS, longer chain PFAS. Granular activated carbon, it's a physical process. You have carbon rich materials that are, that you heat up and it has all these voids in it. And the PFAS compounds that trickle through a bed of this GAC media, basically get trapped in the voids and stripped out. As part of the design for the Navy 'Aiea-Hālawa Shaft, we have basically four trains of this treatment system. And in each train, you have more for capacity basically, and a fourth for redundancy, but there's three vessels. The first vessel is a lead tank of GAC. The second vessel is called a lag tank of GAC. It's basically the same media but extending the process of filtration. And then the third tank is what's called ion exchange, which PFAS compounds that aren't picked up by the first two tanks would be collected and stripped via the third vessel. Then PFAS on the back end, basically, that's the concept.

<u>COMMISSIONER HO</u>: I guess what I'm asking is, other than PFAS, is there anything else? Like, are you also, did we also require you, the Navy to look for and filter out jet fuel?

CDR DUNN: Yes, like petroleum hydrocarbons, you've heard the term TPH, total petroleum hydrocarbons. It's really a large family of compounds, but that's really a main screening indicator for presence of fuel. It can be other things too, biologic, or biogenic based, but the GAC media also addresses those compounds as well as polycyclic aromatic hydrocarbons, which are a lot of the fuel constituent compounds that are related to JP5. This technology will address those. What's great about Navy 'Aiea-Hālawa Shaft is there's no history of total petroleum hydrocarbons. There's no history of these fuel indicator compounds or PAH compounds. Really for Navy 'Aiea-Hālawa Shaft, it's all about PFAS and then making sure we meet safe drinking water compliance criteria otherwise. Red Hill, it's kind of the opposite. It's about the fuel and PAHs and so forth.

<u>COMMISSIONER SPRINGER</u>: Chemistry and systems aside, can you talk to me about how you use the word recovery?

<u>CDR DUNN</u>: Recovery is that both of these drinking water wells were in service for a long time. They were taken offline and out of service. We have continued to pump the Red Hill Shaft, but it's been not connected to the drinking water system and same thing with the Navy 'Aiea-Hālawa Shaft. You might pump it to do sampling or on the Red Hill Shaft case, we've got a treatment system that pulls water out, creates a capture zone, and then discharges that treated water into the South Hālawa Stream.

MEAGAN OSTREM: That was a requirement as well.

<u>COMMISSIONER SPRINGER</u>: So that's what's being recovered?

<u>CDR DUNN</u>: The well capability to provide the drinking water is how I use the term well recovery. We need to recover these two wells and put them back into service for drinking water purposes.

COMMISSIONER SPRINGER: And the recovery monitoring plan?

<u>CDR DUNN</u>: The Red Hill Shaft recovery and monitoring plan, that was the initial document that came out in early 2022 to kind of set the stages, how's the Navy responding to what happened to Red Hill Shaft?

<u>COMMISSIONER SPRINGER</u>: Thanks. So, for every reactivation proposal, there has been this recovery prior to it?

<u>CDR DUNN</u>: No, the reactivation I'd say is interchangeable with recovery. Reactivation process to recover that well back into service.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: I have a non-contaminant question which is given 'Aiea-Hālawa Shaft's history, like increasing chlorides. You can remove your contaminants, but that's not changing your chlorides. Is that going to limit the usability of this as a backup source?

<u>CDR DUNN</u>: The well has been limited to begin with, so yes, absolutely a concern. Of the three wells, it's got the highest chloride concentration, and so if you over-pump that well, then you risk compromising it permanently, that freshwater lens that's there, with saltwater, and then you can't use it for drinking water effectively. That's why the well is not a full redundancy. It pumps less than a million gallons a day, which pales in comparison to either of the other two wells. We use it to supplement the system.

COMMISSIONER KAGAWA-VIVIANI: Yeah, but it's limited in usability.

CDR DUNN: But it is limited.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: That's a huge investment, and I just am wondering—I mean, this is an issue we'll be facing everywhere in the islands, too.

<u>CDR DUNN</u>: Long-term use of the well, I think the Navy will have to evaluate down the line. We'll put this temporary treatment system in place to provide that—we're still a ways out from getting to Red Hill Shaft to be able to bring that online. This really helps us in the near term.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: Is this sort of a proof of concept to kind of figure out?

<u>CDR DUNN</u>: That too. We don't have treatment at Waiawa because the water is amazing. This technology we use on site at Red Hill Shaft today, but not for drinking water certification.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: Not the ion exchange.

<u>CDR DUNN</u>: Right. We'll use it here which is great for supporting the Red Hill Shaft. Ultimately, we're pursuing a permanent water treatment facility for Red Hill Shaft to bring that back into service. I think the Navy will have to look at the long-term investment when we come back around to Navy 'Aiea-Hālawa Shaft down a few years from now.

20250520 00:49:05 – CDR Dunn resumes presentation

<u>CHAIR CHANG</u>: Have you received the funding? Is it still subject to the NDAA (National Defense Authorization Act)?

<u>CDR DUNN</u>: It is still subject to the NDAA. It wasn't fully resourced. So, it was authorized as it's okay, but it wasn't resourced.

MEAGAN OSTREM: Fully authorized, but the funding is fixed.

CDR DUNN: Like incremental because it's such a large [inaudible].

<u>COMMISSIONER MEYER</u>: You've addressed in detail the wells, shafts, generation system, that sort of thing and to a limited extent, the distribution system. What's been done to all the way through the homes and to the faucets, make sure the system, all the tanks, all the hot water heaters, all the other storage devices, etc. are absolutely clean? Not only hydrocarbons, but also PFAS and other contaminants? Because that's a fairly detailed and exhaustive task.

<u>CDR DUNN</u>: For the distribution system, that's gone under pretty extensive monitoring over the past three years. At the start of 2022, there was an interagency drinking water systems team- Army, Navy, Department of Health, EPA, got together and basically figured out the way forward with how to recover the distribution system, put it back in service. There was a lot of preliminary sampling up front during that era then basically what was set forth was a flushing plan of the system, which is where we came up with the zones of the 19 drinking water zones for the Joint Base System and Kapilina Beach Homes. The teams went zone by zone and flushed utilizing smaller scale GAC media vessels to flush that. When we did the confirmation sampling to demonstrate that the

water is fit for consumption, then zone by zone, DOH ended its health advisory to certify safe for consumption. But part of that was, and then embark in a 24 month long-term monitoring program where we sampled the drinking water source every period. We sampled schools and child development centers every period and then we set forth to sample about two thirds of the homes. So about 6,500 homes on Joint Base over that two-year period. Over that period, that effort concluded last March of 2024, and no detections of fuel in the system. But as that was coming to a close, the Navy initiated two efforts. One was a continuation of enhanced drinking water monitoring, and that program was called the Extended Drinking Water Monitoring Program, which is very similar, but more frequent on sampling the source and priority locations of schools and CDCs and clinics.

Instead of every period, a period during LTM was one to six months in duration. It was every month during extended drinking water monitoring, sampling the offline sources as well on a quarterly basis, sampling the distribution system with hydrants throughout every zone and then a goal of sampling all the remaining homes not done during longterm monitoring, which we've got up to 98 something percent of all the homes served by the Joint Base system. We're not going to force it, so if a tenant was either nonresponsive after multiple attempts or they declined it, then we didn't sample that, but sampled around the home and neighbors and so forth. Parallel to that, we've had what the Navy termed a Water Quality Action Team, which was an expanded response. If somebody calls, we set up a call center as well, so not just the utility, but they would call, the Navy would offer bottled water until we came in, inspected the premises, all the plumbing, the water heater, the fixtures in the home. We'd take off the aerators, deposit to a field screening assessment of water quality parameters that you can get real-time information about, and then take a full suite of sampling and send it to the EPA certified lab on the mainland. All of that, but specifically over the past year, we expanded the analyte list for fuel-related constituents, so it's kind of more investigatory towards fuel, whereas long-term monitoring had that, but had some other things in it as well.

Through that program, we've found no fuel in the drinking water system as well. The PFAS sampling has been an unregulated contaminant, which before this year didn't require as extensive monitoring. As utilities across the country move forward to the new standards set forth by EPA, much tighter levels of PFAS thresholds for the select constituents, and then that will be incorporated into the Safe Drinking Water Act compliance by 2029. We're supposed to report data preliminary monitoring by 2027, but all the efforts that we've done over the past year, we've done bi-monthly PFAS sampling of the three wells, Waiawa, Navy 'Aiea, and Red Hill Shaft, and all of that data is up online. We could probably go to the next slide.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: Sometimes it's hard to link the site name with the data that's on the website.

CDR DUNN: Yeah, I have the specific page.

20250520 00:59:27 – CDR Dunn resumes presentation

<u>COMMISSIONER KAGAWA-VIVIANI</u>: So, this is not necessarily on the (Safe Waters) database?

<u>CDR DUNN</u>: The interactive dashboard only has drinking water data because these (wells) aren't tied into the system.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: No, the groundwater. There's the environmental ground water dataset. So, this data that's on this page is not necessarily on the groundwater monitoring website.

<u>CDR DUNN</u>: Correct because we use drinking water analysis methods and standards. There is EPA 1633 for PFAS that we use for the PFAS bi-monthly sampling of the past few iterations.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: That is on the ground water monitoring data, so you got to go in and dive in.

<u>CDR DUNN</u>: That's in this as well. That's the other thing is always open to feedback on our Safe Waters website. It was a bit cumbersome. We're working on it, adding new pages and refining features and so forth.

<u>COMMISSIONER HO</u>: You threw out a number, 1633, and everyone looked a little confused. Tell us what that means.

CDR DUNN: Here, this is the source. I'll reinforce this webpage (<a href="https://jbphh-safewaters.org/public/framework/appcontainer.aspx?url=html.aspx&idhtml=10814&title=Well%20Recovery%20and%20Water%20Resiliency&idMenu=103804&ddlDSN=SYSTM&DSN=SYSTM) is where you want to go to this Well Recovery and Water Resiliency to look at the PFAS data for the drinking water system. It's got for Waiawa Well, the active source, but it has the results for Navy 'Aiea-Hālawa Shaft and it has the results for Red Hill Shaft. There's three main methods basically for analyzing water for PFAS. They are 533 and 537.1 EPA standard methods. Those are the ones used for drinking water. They don't have as many analytes that they look at. Then there's method 1633, which is for ground water. Drinking water and ground water in general is regulated differently, even though our drinking water predominantly comes from ground water sources in Hawaii, which is 97% ground water source here across the state.

Mainland, you might have surface waters or other things, but we wanted to make it a holistic analysis since we did this extra year of PFAS sampling for the wells. Because the two wells that are inactive, they're not drinking water sources, though we've sampled

them or analyzed them for drinking water, that helps because then you can compare it with the active source. You have consistent data sets and analytes across the board there. But because they're inactive production wells, they're technically ground water wells. That's why we added this other method of analysis, so you could look at it through that lens as a groundwater body. That data is there as well and you can compare all of there. In the ground water analysis, there's more constituents that are analyzed for PFAS.

20250520 01:03:57 – Ms. Ostrem resumes presentation

<u>COMMISSIONER MIIKE</u>: When you put these two wells back online, I assume that your monitoring wells will be following that along because as you draw a lot of water out of there, you're going to be moving a lot of water underground. In best case scenarios, nothing happens in the monitoring wells.

CDR DUNN: Correct. Absolutely, that's what we anticipate and expect to see. To that point, the frequency of ground water monitoring that we're doing is really extensive. Kind of the standard is maybe quarterly because ground water moves so slow. But we've done quarterly to monthly back in 2022. Then we went to weekly for a while there during defueling. We went to monthly last year, but when we made a transition after we worked with DOH and EPA, we were pumping the Red Hill Shaft for that capture zone. And we were pumping in about 4 million gallons a day. A lot of concern about the water that's just being extracted. We did a study and basically come to the determination that we can reduce the flow down to 1.8 million gallons a day while sustaining the capture zone. So, 60% or so reduction. To offset that, we again, increase the frequency of ground water monitoring so that we could really home in and see if there's a change, we'd be able to detect it almost immediately in ground water terms. We haven't seen anything though. Which great is over the last three and a half years, that's the data set that I'm really familiar with. We haven't seen anything on the ground water side, thankfully.

<u>COMMISSIONER KATAYAMA</u>: Thank you, Commander. Again, your activation for your shafts and assuming that which are rates are lower historical, you have about a dozen sentinel wells that are yet to be established outside in non-Navy areas. How does that help you to get information on the migration that's happening in the aquifer? Shouldn't those sentinel wells be in place as you're increasing the withdrawal into production capacity of your wells?

<u>CDR DUNN</u>: We would probably look to pump the well around what we have been pumping at the last few years as far as volume drawn from Red Hill when we get to the point of reactivation.

<u>COMMISSIONER KATAYAMA</u>: Well, that's at 5 million or 4 million gallons per day and right now you're at a million.

<u>CDR DUNN</u>: Right now, we're at 1.8. But to that point, we don't have some of those sentinel wells yet. We're getting very close by the way with Department of Transportation. There's five spots with them and we're probably a couple of months out from getting the permit from CWRM once we get all that squared up, by the way.

<u>COMMISSIONER KATAYAMA</u>: Of those half a dozen or so sentinel wells that you have in green, what's the horizon for those?

<u>CDR DUNN</u>: We would probably over the next 18 months, drill all of those ideally. That's the goal. The land use is really the limiting factor as we work through the real estate agreements.

<u>COMMISSIONER KATAYAMA</u>: How does that affect monitoring the migration in the aquifer?

<u>CDR DUNN</u>: That will help supplement conditions there to monitor at that point in time once they're installed but will also help us get a better understanding of the geology that helps put the ground water flow model. The Hawaiian geology is wickedly complex. It's very complex. It will only help inform and make our model better, but that's why we have so many on site, right at the source of contamination. We have many around the site and then at the boundary of the site. If there was any movement, you would see it move across those first before you'd ever see it in a sentinel well. Or if a sentinel well picks up something that isn't picked up anywhere else, then it's another source nearby or upstream of that point location.

<u>COMMISSIONER KATAYAMA</u>: Looking a little further, we're always focusing on sustainable yields. What is the outlook for your total consumption moving forward for the base and supplying the base needs. Right now, you have permits to withdraw rates. Is there any plans for reducing those rates?

<u>CDR DUNN</u>: I know on an annual basis, throughout the summer and the dry months, there is water conservation measures in place. I think that would have to be probably a separate study as far as, hey, where can we capitalize or reduce? We have looked at some beneficial reuse. It's going to require quite a bit of infrastructure to put in, but also not projecting an increase in usage either. So, kind of static.

<u>MEAGAN OSTREM</u>: The Joint Base is looking into other water resiliency type projects, just as many places are. That's something that we could always come back and share more about at another time. It's kind of outside of the purview of our Navy Closure Task Force- Red Hill but being smart with our resources and our water is something that the Navy is focused on overall.

<u>COMMISSIONER KATAYAMA</u>: Well, you're putting all these wells back online and putting on all these treatment plants. I think it'll be timely for you to look at what capacities you're building into these...treatment plants.

<u>CDR DUNN</u>: Certainly. Just like commercial development, similar.

<u>COMMISSIONER SPRINGER</u>: Do all the contaminants move at the same rates and do those rates differ from the ground water?

<u>CDR DUNN</u>: They don't all move at the same rate. I can bring it next time if you like, but there's a good chart and it talks to retardation factors of constituents embedded or dissolved or present in groundwater. Depends on the material that you're talking about, but you could have something that might travel 10 times slower than ground water, or you might have something that travels 20,000 times slower than groundwater.

COMMISSIONER SPRINGER: Always slower, never faster?

CDR DUNN: I don't think so.

COMMISSIONER SPRINGER: Is there a place I can go to find that?

<u>CDR DUNN</u>: We don't have it on our website, but DOH might have something, some Google searching.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: DOH has a bunch of webinars on the HEER-Hazard Evaluation and Emergency Response site (https://health.hawaii.gov/heer/guidance/heer-webinars/), and WRRC in 2022 did a number of seminars there online (https://www.wrrc.hawaii.edu/publications/videos/).

<u>COMMISSIONER SPRINGER</u>: It might have those comparative rates?

<u>COMMISSIONER KAGAWA-VIVIANI</u>: They talk about how to think about contaminant fate and transport and the fact that petroleum has these non-aqueous elements that are more sticky and then dissolved constituents like PAHs that will move with the sort of flux of water. There might be some good diagrams. I'm trying to remember which ones.

<u>CDR DUNN</u>: DOH is actually doing a series next month on ground water. Every Friday next month, there's a webinar on ground water. https://health.hawaii.gov/heer/2025/05/14/groundwater-basics-webinar/

20250520 01:12:58 – CDR Dunn resumes presentation

<u>COMMISSIONER KAGAWA-VIVIANI</u>: I have what I think is a basic [question]. This is not necessarily ground water oriented. It's really about the site-is that correct? So, like looking at the soils and things that could potentially end up in water but not specifically focused on water?

<u>CDR DUNN</u>: Yes. The water table is a couple hundred feet below the tanks. You have this dry zone and in some areas you have perched ground water tables. They're just like little pools below the surface. We're really targeting that area for a lot of this environmental work, remediation work and investigation. I have a fuel spill, some historical release that made its way down 20 feet or something, but it's there. So going in to get that. Or in other instances, it made its way to the ground water. A lot of investigation to characterize and identify what and where that is.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: I have a question. I'm not sure if it's for you or for DOH but given the long history of the facility at this site including legacy use of leaded gas, is the remediation-it sounds like it's very event specific and contaminant specific and site specific. Is there a masterminded approach? A broader scope approach to thinking about what questions need to be asked and where? What analytes, for this whole site. Is that under DOH's house?

<u>COMMISSIONER HO</u>: It's kind of complicated, but Pearl Harbor is a NPL site. We've been working on the Pearl Harbor and the surrounding area for many years and looking at it in terms of what is the historical uses and contaminants and cleaning those up. We are actually looking at other sites other than the tanks within the facility. Based on that, it gives us some more informed understanding of what may be a contaminant.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: And then how to best consider our public health needs.

<u>COMMISSIONER HO</u>: Right. As you know, Department of Health, we're not just a Drinking Water Branch or we're not just the Clean Water Branch. We have the HEER office. We have Underground Storage Tank (UST), our Hazardous Waste. We have a team of scientists and EHSs that meet on Red Hill and surrounding properties. We pull in where we need so that we have that expertise in-house.

<u>CDR DUNN</u>: Okay. Yes. And to that point, Red Hill was established as a fuel facility when they first constructed it. And so, and the drinking water well that's there was established at that time too. But over the decades in use of the facility, there were areas that, hey, there was this previous infrastructure that there used to be a power plant there to help support the facility operations, just a small one. We know that's there. That's going to be part of the evaluation. Other maybe storage tanks or other things that were on site that we know that we're affiliated with, we add that to the inventory and the scope of the investigation. Once we get into the sampling there, then we'll find whichever. Depending

on every work plan that we do for every activity, whether it's tank cleaning, whether it's drinking water or what, any of this stuff, every single work plan is approved by DOH or EPA. It's very closely coordinated. The discussion about, hey, how are we analyzing this? What are we looking for? That's a continuous dialogue.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: I appreciate that there's all this data available. It's hard to know how to parse it, but it's there for those who are like me, interested in trying to understand it better. Appreciate the explainer.

<u>CDR DUNN</u>: Certainly. We're taking a holistic site approach to it because there are individual sites within Red Hill that are kind of somewhere in this process, maybe, but they all interrelate effectively. It's definitely helpful to take that approach.

<u>COMMISSIONER SPRINGER</u>: If the focus is on the PFAS, how might other contaminants be discerned?

<u>CDR DUNN</u>: There's two efforts going on. The team I work with is doing the fuel-related investigation. That's this site assessment. Separate, there is this PFAS remedial investigation that's going on as well, it's concurrent. But we have discussions as well. So, I help support them and they work with our team and they want to drill more wells, we want to drill more wells. So, let's talk about where they want, maybe we can co-utilize or gain efficiencies and deconflict and so forth.

<u>CHAIR CHANG</u>: I'm not an engineer, not as learned as many of the people here. I'm interested in more the monitoring well and remediation. You have a modeling that you're doing and also that UH is doing to try to identify subsurface, what may be happening. Given the rate of potential, you're saying that at this point in time, all of your wells have not picked up any fuel contaminants in all of the monitoring wells around the site. There's not been any fuel contaminants that you've identified.

<u>CDR DUNN</u>: We have detections of, at the tank gallery, so like right in the center, we've got recurring data for like Monitoring Well 01R or Monitoring Well 02. Those are, at the last update, we provided an update, kind of one of those bubbles was centered on that area.

CHAIR CHANG: That's fairly predictable given...

CDR DUNN: It's consistent.

<u>CHAIR CHANG</u>: It's consistent. You're looking at reactivating these two shafts. Is your modeling taking into consideration the rate potential? We haven't seen any evidence of fuel moving, but based upon the rate of the flow of fuel moving and water, when are you

predicting that it would get, potentially if it's migrating, when would it get to these areas that you're proposing to reactivate?

CDR DUNN: We would be seeing it regularly, assuming that it's a constant flow, assuming there's a concentrated presence that's feeding in a certain direction or something like that. We would expect to see that regularly at some of these other locations, and we would probably expect to see it closer to Red Hill Shaft, but we're not, we're actually doing a lot of monitoring of the Red Hill Shaft, and in many instances over the past year, we're not detecting anything, petroleum hydrocarbons or anything. The subsurface geology is certainly complex and it's hard to model, but as the Hawaiian Islands built up, it's lava flow over lava flow, and so you kind of have this general downward flow from mauka to makai, but there's a lot of inconsistencies like Makalapa Crater, Aliamanu Crater, they just come up and they disrupt that kind of natural geology. It's kind of hard to tell where you get lava tubes or something like that, or large voids in lava rock. It's not consistent, it's harder to evaluate than a lot of other types of rocks, sedimentary, metamorphic rocks, whatever. But we would expect to see a continuous or at least an intermittent recurring presence in these other locations, but we're not, so we're trying to understand exactly what's going on at that location, it's kind of held in place.

<u>CHAIR CHANG</u>: But you're using very traditional, more of a conventional knowledge of the geology versus- is UH using another modeling technique that may take into consideration some of these nuances?

CDR DUNN: They are.

CHAIR CHANG: Where did the fuel go? Do we know? Did it just dissipate?

<u>CDR DUNN</u>: Some of it went into the Red Hill Shaft where it got picked up. There's certainly a lot- the balance is still on site. Over time part of that naturally biodegrades, but there's a lot that's in situ, it's still where it is. We haven't seen it move vertically, but then we're also limited in some of that data. That's why these monitoring wells are so beneficial, but they really only provide you that point on point data. When you have the clusters, that really helps to develop that trend, you get a better understanding of what an area is. Then you might also have a fissure right between two wells 20 feet apart, and that's way different.

<u>CHAIR CHANG</u>: You appear to be using very standard conventional predictions versus you may have some geologies that maybe it's someplace in a location we're not even looking at.

<u>CDR DUNN</u>: Yes, that's also the approach of we're trying to create not a 360 but a complete periphery basically around the facility on the property boundary, but then

sentinel wells all the way around so that you can kind of see if it's going to the southeast or south or so on.

<u>CHAIR CHANG</u>: With this activation, reactivation program, you can take immediate measures. Should we begin to start detecting any contaminants, whether it's PFAS or fuel contamination, that you can immediately stop?

<u>CDR DUNN</u>: Yeah, we would probably have to implement some additional measures to do active remediation of something that we would detect. That's part of the site assessment- step three kind of in the process is remedy development for what methods work here on Red Hill or in lava-scapes to extract that.

<u>CHAIR CHANG</u>: I figure it probably would raise the level of comfort to the public. The monitoring is being provided immediately, whether it's the Department of Health and should there be any elevation in any of these contaminants?

<u>COMMISSIONER HO</u>: Isn't that the reason for the sentinel wells, but also we're asking for inline monitoring so that you have real time monitoring so that they can prevent it? But if something goes through, there's also the GAC system that should take the contaminants up.

CHAIR CHANG: Are you guys getting those results fairly quickly?

<u>COMMISSIONER HO</u>: They haven't done any inline monitoring now because their shafts are no longer active. We will, but they're not ready to be activated yet.

<u>COMMISSIONER KATAYAMA</u>: Commander, we talked about the monitoring wells there, some they're coming online within a few months. What is the lead time to protect the public water system, the department of water system? They're outside of that, you're focusing on supplying military resources, Pearl Harbor and Hickam. How much alarm time do they have if something is actually leaching or migrating through the system?

<u>CDR DUNN</u>: If we detected something, we'd certainly be communicating whatever we detected. Our estimates on the ground water flow are very slow, so there would be quite a bit of time to be able to relay or when we look back at 2021, within a week of that detection of understanding that the Red Hill Shaft was compromised by the fuel, it was within a week the Navy and Board of Water Supply secured the wells for three quarters of a mile away.

<u>COMMISSIONER KATAYAMA</u>: Half a dozen or so wells will be online within the next six months or so?

CDR DUNN: No, we would like to get to in the next 18 months to be able to install

those. It takes about four to eight weeks to install one. We could get back to the point of doing two at a time if we have some delay in permitting and so forth. But that's part of what is beneficial is we do have many wells on the northeastern, northwestern boundary so that we would be able to detect anything going ahead of that direction.

<u>COMMISSIONER KATAYAMA</u>: The mauka to makai theory of flow.

CDR DUNN: It will go down into the valley anyway and then we would have a second line or third line with those sentinel wells to help inform that. The Red Hill Shaft, that 2022 Red Hill Shaft Recovery and Monitoring Plan, really the main effort there was establishing the capture zone for Red Hill Shaft. The intent of that is to draw any contaminant into the Red Hill Shaft today and pump it through the treatment system and get rid of it, collect it, remediate. It's a remediation activity today to recover any of that. That's to help offset any movement in that direction.

COMMISSIONER KATAYAMA: That was focused on light fuels, light petroleum.

CDR DUNN: Yes.

CHAIR CHANG: That's what was going into the stream.

CDR DUNN: Yes, the treated F1.

<u>CHAIR CHANG</u>: I would suspect a one-week notice is probably not going to raise a level of comfort and confidence to the public. There's got to be sort of an immediacy, whether you're coordinating with DOH or with Board of Water Supply. I suspect not knowing for a whole week may not be acceptable. I would urge you to think about a more urgent notification process when you're aware of any kind of changes and DOH will ensure that as well.

<u>MEAGAN OSTREM</u>: Right now, we're seeing containment immediately under the facility. And then with all of our monitoring wells with what's happening at the Red Hill Shaft for pumping and the testing that's going on there. We have not seen movement with what we have to date.

<u>CDR DUNN</u>: Correct. That's part of the aspect of the Red Hill Shaft recovery is that real-time monitoring factor. We have that capture zone today to help offset that and treat anything that we do hold, but when we reactivate the shaft, that would effectively be similar. That would be the primary place we would expect to see anything is in that real-time, on the input into that treatment system.

<u>MEAGAN OSTREM</u>: The capture zone is maintained now with the pumping that goes into Hālawa Stream and then when it's activated, then it would continue to act in the same fashion with the additional treatment that's there.

<u>CHAIR CHANG</u>: I'm certain that you have the safeguards in play and I think the issue is more, when is the public notified? The one week is probably just not acceptable. I think there's got to be...and I'm sure it's going to be faster than a week, but I think if you publicly say that, you're going to get a lot more resistance.

MEAGAN OSTREM: Noted, yes.

<u>COMMISSIONER SPRINGER</u>: Is there a profile of the subterranean geological units? Do you folks use remote sensing or anything to determine where those anomalies are?

<u>CDR DUNN</u>: I think we have done some, but it's not a widespread approach, meaning it's specific to a certain area that the team is working on.

20250520 01:36:27 – CDR Dunn resumes presentation

<u>COMMISSIONER SPRINGER</u>: I wonder if there would be a way to collaborate with USGS, given the sensitivity of this area. I appreciated your use of the word, wicked, the wicked vagaries of Hawaiian geology. It would seem like that would be information that would be useful to this effort. I don't know how that works. It's above my pay grade, but I am curious.

COMMISSIONER KAGAWA-VIVIANI: Can I weigh in? I've had the privilege of being able to talk to geophysicists who are working on Red Hill under ONR funding. There are new geophysical techniques, right? But the challenge is when you have a lot of infrastructure, like metal, it gets noisy. There's limitations to the . I think my understanding is they're using the borings from those well drilling to kind of infer and then they build a conceptual site model, a conceptualization. Is that kind of roughly how it works? They build that kind of picture of what you think is happening. Then you have to go and measure to see if water's moving-how the chemistry of what's in the water in the wells- reflects that you got the model- you got the idea right. There's this conversation between monitoring and modeling.

<u>COMMISSIONER SPRINGER</u>: So remote sensing, less useful in this case than in the vast open spaces of Hualālai.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: Yeah, remote sensing you can't get subsurface. That's the hard thing about ground water. There's a whole realm of electrical, geophysical, seismic methods.

<u>CHAIR CHANG</u>: You indicated that UH is going to provide you their modeling by June. So maybe at the next quarterly update, focusing on maybe a presentation on both Navy's modeling and maybe UH modeling and how there's going to be some coordination, collaboration between those two.

<u>CDR DUNN</u>: Certainly. We only want to use their validated data when they publish it. They have completed any of their field studies, but I don't think they've formally reported. They have provided updates, certainly of interest, but we're keen to have once they release the data that we want to consume it and integrate it.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: I think there's been effort to keep a bit of a wall so that it's an independent analysis.

<u>MEAGAN OSTREM</u>: They use our data, but we are not involved in their groundwater modeling.

<u>CDR DUNN</u>: We coordinate and help them get on site and so forth, but I definitely don't want to influence what they're doing. Commissioner Springer, to your point about USGS and University of Hawai'i, we have several forums on a recurring basis that have key stakeholders. There's a subject matter expert quarterly event. There's a Red Hill remediation round table. Those parties are both, and CWRM staff, Board of Water Supply is present in those. There's a couple other entities, but it's really a discussion-feedback-input forum as we approach some of these topics. What other work are you doing that could help inform what we're doing or whatever to help inform and refine our approach on a lot of these things. We have those dialogues with them.

<u>COMMISSIONER SPRINGER</u>: With regard to your earlier statements, the data that's shared among you is data that has already been published?

<u>CDR DUNN</u>: The Navy's data is on the Safe Water website. That's available to anybody.

COMMISSIONER SPRINGER: Also, the UH inputs and...

<u>CDR DUNN</u>: UH has data, but I don't think they've formally published it yet. We have to stand by until they're comfortable completing each of those studies, validating it.

<u>MEAGAN OSTREM</u>: They collect some of their own data using our wells. Is that correct? They're collecting some of their own data from the wells that we have.

<u>COMMISSIONER SPRINGER</u>: As I understand it, then to protect the integrity of the datasets, there's some barriers. Do you all enter into data sharing agreements with one another, or do you work only with published data?

<u>CDR DUNN</u>: For the most part, we just utilize validated data that's published. The regulators have access. We have an online database where the laboratories upload directly into. It's not the Navy handling the data. It's coming straight from that laboratory. When that comes, that database gets populated, the DOH and EPA can see that at the same time that we can. Then thereafter on a regular basis, that's what populates the Safe Waters website for the various datasets that we have on there, whether it's lab reports or either of those dashboards. We have discussions about findings and stuff, but as far as data mining or detailed review of each other's data, I don't think that generally happens. It's really kind of a case-by-case topic. Hey, you know, let's dive into this topic and what is the data showing? Then we all take a look at whatever data is available, kind of go from there.

COMMISSIONER KAGAWA-VIVIANI: The one thing I remembered was that when it was going back to the drinking water system and recovery of certain wells, I think one thing we've learned from both the Red Hill incident and other settings where systems have been contaminated is the value of that sustained monitoring and testing on the tap side for cleanliness-to reassure residents that they're being cared for, that they're being looked out for. I've talked to Andy Whelton at Purdue, and he's found in multiple post-disaster settings is that flushing and monitoring-in this case, it's not flushing, but monitoring maybe when those wells come online at the taps for at least two weeks, maybe is a good practice. I'm not a plumbing specialist, but in terms of that question, Chair Chang had about before and after. Here's your water before 'Aiea-Hālawa Shaft came back online. Here it is after. You may still want to buy drinking water if you don't feel comfortable, but here are the results over the span. Then people can sort of come to restoring trust in their own water over time.

I think without that, there's this assumption that maybe data and information is being withheld or people fill in the gaps with their own conclusions or go and buy tests for the wrong thing. It might help your cause in putting both of those wells online given historical PFAS, in which case, you know, GAC is actually better to have between the well and your tap. With Red Hill, here's fuel and here's how we're thinking about it. Here's what we're measuring for. And if it is coming up empty, don't take my word for it. Here's the data, too, on Monday, on Wednesday, on Friday, Sunday. It might just be helpful and you don't have to test everywhere in the system, but the areas that would perhaps have the highest percentage of contribution from that well. Just thinking about it from the consumer, the household side, is a different logic than how we think about the issue as regulators and where we test and what we measure. Just some thoughts there. De-confliction, is that what that means? I don't even know what that means.

<u>CDR DUNN</u>: De-conflicting? That just means coordination. There's a lot of activities that you're trying to coordinate.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: I just thought it was like conflict. I think just thinking about it, what it's like on the other end of the waterline and taking off your

operator or engineer hat to think about the mom hat or something. It could be maybe help guide how you guys want to sort of manage bringing those back online. It's not within DOH to tell you to do that, but maybe it is in your interest.

CHAIR CHANG: I think those are good points. I even think about randomly placing in people's selected homes so that they can be the ones who can actually verify rather than the Navy saying, oh yeah, no, we've tested. You actually have several monitors placed in individual, whether they're homes or businesses, and that you have these people who can verify and confirm, no, this is what my results were before and now. As much as you guys are doing, and I know you're doing a lot, I just appreciate the update, but this is one that there's so much issues of public perception to overcome that it is best to have the community residents be the ones who can attest to the validity or the accuracy of the results. Think about that, but this is one because it is in our collective best interest as well. Whether it's CWRM or DOH, that there's a level of confidence by the community in what you guys are doing, so thank you.

<u>COMMISSIONER KATAYAMA</u>: This is a curiosity question, really, Commander. The programs that you've outlined, especially like the monitoring, have a very long horizon. You've outlined in your Red Hill tank closure at least a 10-year horizon. Out of curiosity, what is the standard manning for these organizations, and is it part of a formal organization where the resources are standard manning and they're going to be funded for this, or is it a year-to-year asset allocation funding?

<u>CDR DUNN</u>: Conventionally, the Navy has a program called Environmental Restoration for the Navy that handles any of these cleanup actions, and so there's a separate funding program for it. There are separate subject matter experts, remediation managers. That's what this PFAS remedial investigation, that's the team that is managing that project. The Navy Closure Task Force was established for specifically the timely closure of the Red Hill and then to execute the environmental remediation. Our team, or the office that I work in, we're just like the Environmental Restoration Navy personnel who were established as a team before defueling was decided, before Closure Task Force was established, and so we've been embedded in these organizations to help and make sure we sustain these efforts regardless of that overarching framework. From the technical execution piece, it's the same team that's been there since the start of this project executing this, and it'll be the same entity that's managing that over time.

<u>COMMISSIONER KATAYAMA</u>: What's the standard manning for your organization, out of curiosity?

<u>CDR DUNN</u>: I don't know if it's standard. What I can say is it's civilian subject matter experts that are doing the work, and we have contractors that perform the actual cleanup, but the folks doing the coordination with regulators, the work planning, the oversight, some of the resourcing, reporting, that's the Navy civilian experts, civilian technicians,

engineers, scientists that are doing that work. That's conventionally how we do it. We may have officer or military leadership, but we also leverage industry expertise to do the actual remediation work and investigation, which is what we're doing. This is how we're doing it today. It's the standard approach to it. When my assignment is up, it'll be the same group of engineers and scientists that continue to work on this.

CHAIR CHANG: There'll be institutional or continuity notwithstanding the uniform?

CDR DUNN: Yes.

<u>MEAGAN OSTREM</u>: And that was in place before Navy Closure Task Force stood up. There's collaboration happening now, and then it will continue on. If you're familiar with the RAB meetings or the Restoration Advisory Board meetings that happen quarterly, they focus on those efforts. That's a way to get a little insight into some of the other work that the Navy does in terms of cleanup efforts.

COMMISSIONER KATAYAMA: What's the funding cycle then?

MEAGAN OSTREM: There's annual funding that goes into resourcing the organizations depending on what the workload is. That's kind of dependent on where you are in the process. You may have more engineers than others in the environmental remediation or the RCRA (Resource Conservation and Recovery Act) cleanup for Red Hill. You can say that's one project, but there's so many efforts below that. Each of those sub-efforts have project engineers or scientists assigned to help develop the contracting, oversee the contractor, and do all those specific effort. We have a pilot, say, for the soil vapor extraction. We have one engineer assigned to plan and execute that project. It's done by a contractor, but that continuity persists. If that effort ends, it would be resourced for a couple of years until it's done. If there's no continuation of it, then that may change, but there might be a new one or vice versa. It's kind of dependent on what the workload is that drives that extent of contracting and oversight. There is an annual program that supports environmental restoration work.

<u>COMMISSIONER KATAYAMA</u>: Currently, the program is at least a 10-year horizon closure and monitoring indefinitely.

<u>CDR DUNN</u>: Yes, and actually, the Navy plans that work for environmental restoration over decades. When we do operation and maintenance for maybe a utility, we have a five-year look, but when we get into the environmental services and remediation, we talk two or three decades of planning out of, hey, there is long-term monitoring. There is remediation. It takes years to plan and execute.

<u>COMMISSIONER MIIKE</u>: I just ask you not to use the word environment. It would be like DEI, and all of a sudden, there will be no federal funding. I'm serious. You know that's happening.

20250520 01:54:21 – CDR Dunn resumes presentation

PUBLIC TESTIMONY - None

20250520 01:59:20 – Break

20250520 02:13:47

B. ACTION ITEM

1. Authorize the Chairperson to Enter into a Memorandum of Understanding (MOU) with the Ulupono Initiative LLC to Fund Professional Graphic Design Services in Support of the Hawai'i Water Plan Framework Update and Delegate to the Chairperson to Finalize the MOU and Make Non-Substantial Edits as Appropriate

PRESENTATION OF SUBMITTAL: Lyss Rousseve, Planning Branch

QUESTIONS / COMMENTS

<u>COMMISSIONER SPRINGER</u>: Mahalo nui for this agenda item. In the background where you talk about providing sufficient guidance for proper protection, conservation, and management of the waters of the state, I think that this proposal also indicates our acknowledgement to provide information to the people of Hawai'i in a clearly accessible and understandable fashion so that it's more user-friendly. Looking at the work that's being done across the other agencies, this is welcome for us. Mahalo nui.

<u>CHAIR CHANG</u>: I have much appreciation to Ulupono to gift us the service, but I have two questions. One, what kind of supervisory role will CWRM have as an oversight over the product? While it's a gift, it should reflect CWRM. What is the role of CWRM in managing this service?

<u>LYSS ROUSSEVE</u>: Yes, Chair, thank you for the question. Ulupono won't start procuring the services until the MOU is signed. And then once we have a graphic designer selected, then at that point, CWRM is working with the graphic designer to make sure that the intent of the Hawai'i Water Plan Framework is met and all the updates that we want to incorporate into the updated framework are also incorporated.

<u>CHAIR CHANG</u>: Does CWRM have the final say in the work product?

LYSS ROUSSEVE: Yes, Chair.

<u>CHAIR CHANG</u>: Okay, great. Is there a quantification of how much this gift amounts to in terms of dollars?

<u>LYSS ROUSSEVE</u>: We did some preliminary research about how much this costs, other previous initiatives, and it's about \$30,000.

CHAIR CHANG: Appreciate the responses.

<u>COMMISSIONER HO</u>: Under page three of the MOU, section 11, CWRM agrees and then Ulupono agreement. I don't think it says anywhere that CWRM has the ability to dictate content. It just says that CWRM will provide staff time, all of that. CWRM acknowledges and confirms that it's not obligated. And then they, Ulupono, will identify professional graphic services, provide funding. But if you are concerned about content, we should put it in the MOU.

<u>CHAIR CHANG</u>: I appreciate that because I think that's why I raised the question. And looking at the MOU, it wasn't clear to me that CWRM had the final approval, because this is ultimately going to be our work product. I'm assuming this is going to come back to the Commission for approval. So, it really should be a reflection, appreciate the coordination, the funding, but it really should be the work product of CWRM and the Commission's policies.

<u>COMMISSIONER MIIKE</u>: Can I make a comment on that? From what I understand, this is a gift, and a gift we can refuse it if we don't want it. It seems to me that that already implicitly says that in the collaboration, we're going to make sure we want it.

<u>CHAIR CHANG</u>: But my fear is once we sign the MOU, and if this gift amounts to \$30,000, and they rely upon our agreement, can we then subsequently refuse it? I guess we could.

<u>COMMISSIONER MIIKE</u>: Well, it's clear to me, it says that this is a gift, no strings attached. So, at any time we say, oh, great gift, but we don't like it. I don't want this MOU to get too complicated.

<u>CHAIR CHANG</u>: Yeah, I hear what you're saying, but I do want to make sure that this is a product of CWRM.

<u>COMMISSIONER HO</u>: It does say indeed that all materials given to or made available to Ulupono by virtue of this MOU is identified as proprietary or confidential information and will be safeguarded by Ulupono. It's information we're giving them shall not be disclosed without prior written approval. Whatever information we give them, they will save as proprietary and confidential, but it doesn't say anything about what we get from them.

<u>CHAIR CHANG</u>: Lyss, you kind of hear what we're saying. So, making sure you're working with Colin to have the document accurately reflect that. I don't want to in any way diminish what we're getting, because this is a great service. If it's not put in a form that people are going to read, nobody's going to read it. It doesn't help us. But on the other hand, we also need to make sure that it is publicly viewed as our work product.

<u>LYSS ROUSSEVE</u>: Absolutely, yes, Chair, understood.

<u>COMMISSIONER HO</u>: Actually, this agenda item really is for us to give you the authority to negotiate the MOU. Isn't that the agenda item?

<u>CHAIR CHANG</u>: To enter into and finalize, yes. You're right. I'm going to look out for our interests.

<u>COMMISSIONER SPRINGER</u>: A question to the Commission, do we have a strategic plan that is linked to budgeting, either for a year or over a longer period of time? Because it's interesting that the recommendation was made in 2000, here we are at 2025. It's timely, and the gift is great, the \$30,000. But how do we keep an account of what we intend to do against what we have to spend on it?

<u>COMMISSIONER MIIKE</u>: But this isn't connected to our budget at all. You just put a price on it and then it's going to be a gift.

<u>COMMISSIONER SPRINGER</u>: I understand, and I'm sorry, I'm trying to catch up with you. And if it's appropriate to take it up with personnel at a later date, I can.

<u>CHAIR CHANG</u>: This Commission drives overall policy, but the implementation is up to staff. But to a certain extent, our budget is really dictated by the Leg(islature).

<u>DEPUTY KAHAHANE</u>: But I think it's very fair to say that we could have a strategic plan, and I think should have a strategic plan for how we plan out into the future. How are we going to spend our budget? How might we build out our staff? That's absolutely fair. And I think could be the subject of a great conversation or series of conversations in the future.

COMMISSIONER KAGAWA-VIVIANI: It sounds like there may be an edit that you

implement. Is that non-substantive or substantive? Do we need to put that on record right now?

COMMISSIONER HO: Right. So, we have to make a motion then?

<u>CHAIR CHANG</u>: We can just amend staff's submittal. The motion can be to approve staff's submittal with the amendment of the provision.

PUBLIC TESTIMONY - None

20250520 02:27:13

MOTION: (HO / KATAYAMA)

To authorize the Chairperson to make substantive edits to enter into and finalize the Memorandum of Understanding with the Ulupono Initiative LLC to fund professional graphic design services in support of the Hawai'i Water Plan (HWP) Framework update.

11. CWRM AGREEMENTS

- 2.1 CWRM will use its best efforts to do the following:
 - d. CWRM shall retain final authority to approve any graphics produced as part of this effort and shall determine, in its sole discretion, whether to incorporate any graphics produced into the Framework.

UNANIMOUSLY APPROVED (HO/MIIKE/MEYER/KATAYAMA/CHANG/SPRINGER/KAGAWA-VIVIANI)

20250520 02:28:22

B. ACTION ITEM

2. Approval of the Project Description for the Wai'anae Watershed Management Plan Update, City and County of Honolulu, Honolulu Board of Water Supply, Water Use and Development Plan, Hawai'i Revised Statutes §174C-31

PRESENTATION OF SUBMITTAL: Katie Roth, Planning Branch Chief

QUESTIONS / COMMENTS

<u>COMMISSIONER KAGAWA-VIVIANI</u>: You've already done round one and two, stakeholder outreach, or you're in round two, and that's community meeting?

<u>BARRY USAGAWA</u>: I think we did round one. Lala, you can correct me if I'm wrong, but community meeting two is coming up. We do it continuously, so it may be where one was who we did already, Lala?

<u>LALA NUSS</u>: We have gone through round one, and that was through 2024. We are currently in our round two. The list you see there are organizations and folks we have either met with already for a consultation one-on-one or have in the pipeline to meet with in 2025.

<u>BARRY USAGAWA</u>: The feedback we've been getting is pretty awesome.

<u>COMMISSIONER KATAYAMA</u>: Out of curiosity, how does land use and county community development plans integrate into your water demand model?

<u>BARRY USAGAWA</u>: In general, the way land use and water is, it's around policies, right? We should have sustainable policies in the watershed, and then...

<u>COMMISSIONER KATAYAMA</u>: Well, the land use, looking at re-upzoning or rezoning, or sort of re-configuring.

BARRY USAGAWA: In the water demand model, the way that we forecast demand is through population projections that the city does, the planning department does, by looking at the number of subdivisions that came in, the number of master plan developments that are in the various processes of review, and where they may be placed. It's an island-wide thing. They break it up by land use districts and if you're increasing population, the assumption is that additional person will use additional water. We take that up to 2045. But in so doing, there is also a decreasing component, like conservation efficiency, that's still overlaid with that. Even though we start seeing slight increases in water demand, we are actually experiencing a decrease because of more efficiency. Plumbing codes must also increase water and sewer rates that incentivize less water use. So, they're becoming more efficient and using less water. That's how we would incorporate the land use plans and their projections of growth into our forecasting.

<u>COMMISSIONER KATAYAMA</u>: Is that current code you're based on, or is it sort of a future anticipated, like requiring R1 use? I know that this is sort of crystal balling a lot of things. I just want to know the sensitivity to all of these kinds.

<u>BARRY USAGAWA</u>: Reuse, unfortunately, in Wai'anae is limited because the effluent has a lot of seawater infiltration into the collection system. It's in the range of 2,000 milligrams per liter. That's too salty for irrigation. They would have to desalinate it. Opportunities for reuse is in Waimānalo, of course Honouliuli is the largest recycled water system we have, but Paalaa Kai in Waialua, and Kahuku. Those, the effluents are

lower quality that can be reused. To the point though, if we're projecting that even though population is maybe going up and yet demand may stay plateau at level, that takes a lot of work to ensure that conservation measures are there, the incentives, and then we can diversify our water system where we can using stormwater capture and incentives for green infrastructure. Gray water reuse, you can do a lot of that. Individual homes, you can do it in larger developments. They're doing one on Kapi'olani, they're on Date Street, Kuilei, they're flushing toilets with gray water reuse. We've asked folks like the new Aloha State on redevelopment, because there's a limitation on sewer capacity, that they will have to then build a gray water reuse system and flush toilets with it.

<u>COMMISSIONER KATAYAMA</u>: Are you driving those kinds of things, or is that by county ordinance? I just want to understand.

<u>BARRY USAGAWA</u>: It's not really a county ordinance. It's sort of embedded in the ordinance. The way I look at it is that, you want a meter from us, you've got to reuse. It's as simple as that. We can condition it, but we're willing to work with you and give you incentives and give you a rebate for doing that, right? There's not just a heavy hammer and stuff. Carrot and stick is what I used to talk about before. That's in one hand. Don't look at what's in the other.

<u>COMMISSIONER KATAYAMA</u>: That's good, Barry. When we get your plans, get a feel for how these things are woven in, basically, I like it.

<u>COMMISSIONER MEYER</u>: I think it's important to be explicit so the understanding is thorough and well-balanced.

CHAIR CHANG: See what the next agenda item is? It's the petition for the designation of the Wai'anae aquifer sector. On O'ahu, every place else is identified as a water management area. A lot of your water management plans have somewhat been validated by the existing permitting process through water designation. But here in Wai'anae, it's not. We've got two potential processes going on and it's chicken and egg, or which should go first. We should be guiding, because your timeline for this process, the water management plan, as I understand it, it looks like it's going to go on to potentially- what was your timeline? 2026? 2027. We're concurrently moving forward on the water, the water designation process. We're going to be giving out permits, but I just want to know from you, so while we're proceeding with our process, how do you see the integration of your planning process, the watershed management plan with the water designation process?

<u>BARRY USAGAWA</u>: You're posing good questions. I appreciate the question, Chair. It's complicated. I think we'll have the projections, but we also are looking at, after the action to designate, there's one year to submit water use permits. In those, what quantities do we come in with? It's more tied, I think, to what the yields will be, not the demand. The

demand is sort of, we're trying to meet it as much as possible, but we don't want to be asking for more than the well can actually produce. Otherwise, you get air in the dikes and salt water in the basal, right? We're looking at what has been used historically, but then if you go too far back, now there's a climate change layer. The rainfall, it's not the same like it was before. It's decreasing, so then what will it be? But it has to be tied to what we think that well can produce.

CHAIR CHANG: To a certain extent in Wai'anae in particular your, it is more than just a yield because you are pumping water into Wai'anae from Pearl Harbor. The health of Pearl Harbor to a certain extent dictates the water uses in Wai'anae because if for some reason the Pearl Harbor aquifer, the salinity levels, chloride levels rise or something, or we find this, the Red Hill, the fuel contamination is, we've gotten a better understanding. There are so many contingencies that are applicable to Wai'anae that there are processes outside. I'm really kind of grappling with this very difficult, it's very complicated, but trying to understand the interactions of these two planning processes and how do we issue out permits if we subsequently find out through your water management planning process that we're going to have to make adjustments on the allocation.

COMMISSIONER MIIKE: I assumed then that the half of the water used in Wai'anae coming from the Pearl Harbor aquifer is under your water use permit. When we designate, I'm assuming we're going to designate, then we only deal with the water that's coming out of the ground in Wai'anae because you've already had it. The issue though for me is that since we're going to be looking at existing use out of the Wai'anae aquifer, we want to take a good look at what's reasonable and beneficial. The ones that are being used from the Pearl Harbor aquifer is already assumed to be reasonable and beneficial when if we're talking about half and half, and if we start saying to the current users of the groundwater over there, no, you're using too much, and then we don't do anything about the ones coming out of the Pearl Harbor aquifer. Seems to me there's an inequity there. So that's an issue that I want to ask the Attorney General to take a look at.

BARRY USAGAWA: We'd be happy to provide numbers and help frame that discussion. I'll note that the Waipahu-Waiawa aquifer- 104 is the sustainable yield, and then pumpage is something like 60. There's unused sustainable yield there, maybe affected by climate change, but 'Ewa-Kunia, that's going to decrease as well as Mākaha and Wai'anae. Once sustainable yields are set, we're going to have to try to meet demand, but we know that our system limitation, we can't get water all the way to Mākaha. If the straw is long enough, you can only blow so much, nothing can come out the other end. We can take it to Wai'anae town, Pearl Harbor water.

<u>COMMISSIONER MIIKE</u>: The current brown water from Wai'anae aquifer you're being used is coming through your system, right? So, you're going to be the applicant for the existing use?

BARRY USAGAWA: For our sources, for BWS sources, yes.

<u>COMMISSIONER MIIKE</u>: For the individual.

<u>BARRY USAGAWA</u>: Except for like two wells in the golf course, East Course, and I think that's the only big one that I know of, the rest are small.

<u>COMMISSIONER MIIKE</u>: If I remember correctly, there are streams up a higher elevation and none or very few of them reach the ocean, right?

BARRY USAGAWA: Right.

<u>COMMISSIONER MIIKE</u>: So, they're going into the ground.

BARRY USAGAWA: Yes.

COMMISSIONER MIIKE: My issue is that if we designate Wai'anae as a groundwater management area, we also have to have permits for the surface water based on the Supreme Court decision in Waiāhole that said that if there's an undisputed connection, then permit is subject to both ground and surface water. That's a precursor comment on the next time around, I would at least personally want specific language in there that recognizes that. Because my gripe with the Waiāhole case is that we have never, over 25 years now, never subjected surface water in Waiāhole to the permit system. And I've been pushing that with the Attorney General ever since the Waiāhole and got nowhere. I want to make sure that if Wai'anae, if there is undisputed connection between surface and groundwater, both of them are subject to the permits.

<u>BARRY USAGAWA</u>: I would imagine that our tunnel sources that draw dike water that otherwise would feed the stream would be with the understanding that some of that water would be diverted from the stream, it could be permitted down. Recognizing that interaction and still keep it ground water management area. But yeah, your point is well taken there.

<u>COMMISSIONER MIIKE</u>: I think the issue is not going to be so much you folks, but the people who are currently diverting water off the stream on the upper reaches.

BARRY USAGAWA: There are three that we know of in Kaupuni

<u>COMMISSIONER HO</u>: On the title of the agenda item, it says approval for project description of Wai'anae watershed, update City and County of Honolulu. Is this document a City and County of Honolulu document?

<u>BARRY USAGAWA</u>: Yes, it'd be treated as such. It's adopted by ordinance. As in chapter 30, we, Board of Water, has chosen to update the water plan, but it's in ordinance, it's in coordination with planning and permitting and the Water Commission.

<u>COMMISSIONER HO</u>: Right, because the statute §174C-31 sort of kind of talks about the county updating its water use plan and development plans as necessary. I have a very basic question. If it is not a document that the Commission is using, we'll use it, but it's not something that we're requiring of you or maybe we are requiring because it has to be updated, but we don't have any control over the content because your ordinance tells you what it is and the statute or the rules tell you what it is, why are you before us for approval of the project description is my question.

KATIE ROTH: The requirements for a project description are not currently anywhere in the Code or admin rules, but they reside in the framework document, the document that we're currently in the process of updating. That's for the requirement that each county water use and development plan, before it's written, come to you with a project description at the initial step. But in terms of what we could cite to in the statute, that was the closest nexus.

COMMISSIONER HO: I see.

<u>CHAIR CHANG</u>: We really don't approve the water, the Wai'anae Watershed Management Plan?

KATIE ROTH: We do.

<u>CHAIR CHANG</u>: We're approving the project description because that's part of the framework.

<u>KATIE ROTH</u>: You're approving the project description, which is part of the planning process for the water use and development plans. So, you have authority to approve and adopt water use and development plans as part of the Hawai'i Water Plan.

<u>COMMISSIONER MIIKE</u>: You're asking us to approve this as to assure that when the plan actually comes to us, we approve it.

<u>KATIE ROTH</u>: Yeah, that's part of it. When the plan comes to you for adoption, we will vet it for what you see here in the project description.

COMMISSIONER MIIKE: It's sort of like a preliminary look at it.

KATIE ROTH: Yeah.

<u>CHAIR CHANG</u>: But it also gets approved by the county? Procedurally, where are we in the chain of approval process? Are we the final?

<u>KATIE ROTH</u>: We are the final, yeah. Historically, there's kind of been weird things that have happened where fifth body has approved and then it's gone to the county council for adoption. But with the East Honolulu plan, we kind of reinvented that process and decided that it should go before the county council- it was first, right? And then it came to the Commission?

<u>BARRY USAGAWA</u>: Yeah, we did it for all the plans that got adopted. But there's a public hearing at this level, but there's a number of readings and they go back and forth. So, comments from each public hearing get crossed over, put in the record. Then at the end of the day, the ordinance is done first because of the requirements in statute.

<u>KATIE ROTH</u>: This is not unique for O'ahu. The other counties typically also have to adopt via ordinance with the exception, I think, of Kaua'i. Maybe if I could go back to your question, Chair, about these two processes and how they may dovetail with one another. The Hawai'i Water Plan and its component parts, including water use and development plans, are intended to inform decision-making by the Commission and by staff. So, this plan should inform our decision-making on the water use permits.

<u>CHAIR CHANG</u>: That planning process, the water management, they're looking at a 2027.

KATIE ROTH: Well, given how long it's taken us for Lahaina, I don't know if I can say that we would have permits figured out prior to 2027. The hope is that maybe we could. But I think even if this document isn't final, it could still be, staff will be reviewing it and would have some insight into what the plan will say. The way that the plans have been used and should be used for the water use permitting process, they can inform the alternatives analysis to understand what or lack thereof, maybe alternative sources of water may be available within this region. They can be used to inform future source development. If there's a new well coming before us, we'd want to look back at this plan and see, was this identified as a future source by the county? Was this development project part of that plan anticipated in these community plans at the county level? Things like that. Then Ka Pa'akai is another component where this plan is a little bit unique in that sense. All of the Board of Water Supply plans do consider more of the T&C, traditional customary practices. Other county water use development plans have not done that, but that's something we're hoping to change with the framework update. So, the extent to which this plan may consider and evaluate what practices occur within this region could be used to inform the Ka Pa'akai as part of the permitting process.

<u>CHAIR CHANG</u>: That is a little bit of reality check, you're right. We don't have a stellar track record in our permitting process as being expeditious.

<u>COMMISSIONER SPRINGER</u>: You used two of my favorite terms, ahupua'a sensibility and conservation efficiencies. I'm looking, hopefully, that based on what you've described to us, water availability may come in line ahead of land use. It seems like we investigate water resources after commitments to develop land have been made. When using my ahupua'a sensibility hat, I'm not going to build a lo'i if there's not a stream nearby.

BARRY USAGAWA: You check if there's enough water first.

COMMISSIONER SPRINGER: Yes. Are we inclined in that direction now?

BARRY USAGAWA: Another great question from the committee. I look at it as a concurrency. They call it hand-in-hand, but you cannot plan for the next big growth area until you know how much water got. We don't know how much water we will need. I mean, that's resource-wise, right? In our system capacity, we can't plan for expanding that until we know where the growth is. So, it's a chicken and egg, but it's concurrent. I like to think that just because you put them in a plan, that's how it was before. Just because you put them in a plan, we got to find the water to do that. To a certain extent I hope that they have the wherewithal to at least ask us, okay, so what is it going to take? We get to comment on the land use plan. If they come in, say, too early, we don't have the capacity, then it's a no, because we can't serve them. Even with this whole climate change layer and potential reduction of the sustainable yields for the aquifers, because rainfall is decreasing, we already have told some of the large transit-oriented developments that we cannot confirm all the water that you're projecting.

Then it's a first-come, first-served on our system on the remaining amount. You have to layer in our shut down of Red Hill, and now the sources that used to come to town, used to go to 'Ewa, they're going to town. Now it's less for 'Ewa and Wai'anae. If you start to reduce sustainable yields there, then it gets to a point where we don't have the capacity. It's thin now. That's why it puts even more pressure on getting new sources drilled, always on the conservation, because that's cheap. Expand, reuse wherever we can. All those things still come into play, but we're trying to support growth. But they have to have an idea of how much water got before they do because otherwise we'll just say not yet.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: I was thinking about how much county water use or island water use and development plans have been for me as a reference. They're hugely useful. If I have a question on understanding Maui, I go to the 1,300 page Maui island plan. These are really helpful. What's really nice is not getting it on the back end. I've never been around for the initiation of one of these, but to have this conversation on what's in the plan early on, it's really useful. It seems like you're piggybacking the research for designation and kind of taking advantage of some of those meetings and

convenings and people's awareness and involvement. It seems sensible to have these running together.

BARRY USAGAWA: I think it's a unique opportunity.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: Yeah. I do have a question and it's outside of Wai'anae because of the dependence on 'Ewa, and maybe it's out of scope, but I'm going to ask it anyways. What's the timeline for 'Ewa, PUC and Central because of those interconnections? Is it going to happen before you retire?

<u>BARRY USAGAWA</u>: Yeah. I promised Steve Girano and Sheila Stimpdiak that I'm not going to retire until I get those done.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: Because those are the hardest ones on this island too, politically, and physically, figuring out.

BARRY USAGAWA: Then I ran out of money and I'm finding a little bit, but PUC is the one we're working on now. We're trying to add more clarity around sea level rise impacts to Waikīkī as one of them, and as well as Iwilei. So, when you think ahupua'a approach, it's all water, including seawater too. That's why it gets very complex. It goes beyond the use and development perhaps. The flooding in Waikīkī, the wall, all of those things all kind of come into play. And then we have to update the numbers because we deferred it for a number of years, but it's coming. Working on it.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: It's hard to do it in pieces, right? As you say, 50% of Wai'anae's water is coming from 'Ewa, but then there are shifting needs between these system areas. How is this in conversation with, they used to be called CDPs or the general plan and the Wai'anae component. Is that the Sustainable Communities Plan? Because I see it was supposed to be done in 2024. Is that wrapping up and that gets folded into this as well?

<u>BARRY USAGAWA</u>: Right. So, they have visions for their future, what a sustainable community could look like. And they actually have areas or sections in there about water conservation and resources and pollution and stormwater management and stuff. Those they get from this update and we...

<u>COMMISSIONER KAGAWA-VIVIANI</u>: Can integrate kind of...

<u>BARRY USAGAWA</u>: Yeah, it gets integrated because it goes through the same long range planning division of the Department of Planning and Permitting in the city.

JONATHAN SCHEUER: Aloha mai kākou, Jonathan Likeke Scheuer here with Kahālāwai Consulting, consultant to the Honolulu Board of Water Supply for item B3,

the next item that we drafted the designation petition, but your conversation seemed to evolve to include some of the issues coming up in B3. Barry actually just motioned me up to the table. I think it was in reference to your question on the relationship between the two items, as well as Dr. Miike's question about stream flows and how surface water and groundwater permitting might be handled in the area. Since I am here, I'll just say, in response to your main question of how do these two processes interlink, I think if you think about the origin when the Code was being debated in the Legislature and passed, sometimes how it was framed was the planning section of the Code, the Hawai'i Water Plan was supposed to avoid conflicts and designation was there if you couldn't resolve them otherwise. At least I heard some people who were involved in those debates as sort of framed in that way. I've grown to appreciate that they're really more complimentary processes.

Designation really is, just imagine if you were the Honolulu Police Department and there were speed limits everywhere, but you could only enforce the speed limits in designated areas. That's really what designation is. It's the only tool that gives you guys the power, whether it's a stream flow standard or a well construction pump installation permit to actually put meaningful conditions on the amount of water that's taken. You need it as a tool to do it. It's complimentary, especially in areas like Wai'anae, like on the island of O'ahu, where the Water Use and Development Plans are really community driven, ground up and taking comprehensive looks at water so that you have the ability to, when considering water use permits or other decisions, to look at the most recent community driven version of how they want their water to look and conform your decision-making to that.

The other connections I'll just point out, the watershed designation process grew out in part from the 2009 Wai'anae plan, where the community was saying, we want to have a level of protection in our area similar to the rest of O'ahu, so it's going off that. And to the degree that you're worried that this planning process might not be complete by the time in which you're considering water use permits, including those from the Board of Water Supply, it's not as if you don't have a Wai'anae Watershed Management Plan in place that you've approved. You do, you have the 2009 version. So, you'll be able to rely on that, as well as any updates that the Board of Water Supply has given you to that point before you adopt the final thing. Is that helpful, Chair, in response to your question?

PUBLIC TESTIMONY - None

20250520 03:23:18

MOTION: (KAGAWA-VIVIANI / SPRINGER)

To approve staff recommendation with the following amendments:

1. Page 5

Phases and schedules for the WWMP can be found in Exhibit 2, which include:

Phase		Duration
1.	Plan Overview, Watershed Profile,	September 2023 – May 2025
	and Stakeholder Consultations	
2.	Water Demand Analysis	June 2025 May 2025 <u>– July 2025</u>
3.	Policies, Projects and Strategies	July 2025 – January 2026
4.	Implementation Plan	February – April 2026
5.	Agency Review Draft & Public	April 2026 – January 2027
	Review Draft	T J
6.	Prefinal Plan, Plan Approval and	January – August 2027
	Final Plan	

2. Page 5

AUTHORITY:

The State Water Code recognizes that the HWP must be continually updated to remain useful and relevant and further specifies that "[e]ach county shall update and modify its water use and development plans as necessary to maintain consistency with its zoning and land use policies" Hawai'i Revised Statutes §174C-31(bq). Submission of a WUDP project description for review and approval by the Commission is part of the planning and WUDP update process per the Framework (2000).

UNANIMOUSLY APPROVED (HO/MIIKE/MEYER/KATAYAMA/CHANG/SPRINGER/KAGAWA-VIVIANI)

20250520 03:26:54

B. ACTION ITEM

3. Chairperson's Recommendation, Honolulu Board of Water Supply Petition for the Designation of the Wai'anae Aquifer Sector as a Ground Water Management Area

PRESENTATION OF SUBMITTAL: Deputy Ciara Kahahane

QUESTIONS / COMMENTS

<u>COMMISSIONER MIIKE</u>: Just to reiterate my comments in the past is that I would like as part of the submittal that it recognizes that there is a direct connection between ground and surface water, and that designation of ground water management area subjects surface water to the permit process and does not require a separate designation as a surface water management area. I refer the Commissioners to the original Waiāhole

decision that said exactly that. Not only that, but in the Supreme Court's decision, it said that the Commission itself had said that, but then in the Waiāhole decision, they had decided, including me, who was an ignorant Commissioner at the time, but the Commission had decided that they could not regulate the surface waters.

The Supreme Court is very clear that whenever you designate one or the other, surface or ground, and there is a direct connection, both are subject to the permit requirements without having to designate separately another one. I'd like that as part of it, so that I think the people who are currently diverting waters in the Waianae Aquifer need to know that we will have to look at them to see about their uses of water, and not that we're going to prohibit it, but it has to be justified.

<u>DEPUTY KAHAHANE</u>: If I may make a suggestion, I think we will need to make sure that as we're developing findings of fact, we include some findings to the extent of the interconnections between surface and ground water to provide a stronger basis for that kind of regulatory decision.

<u>COMMISSIONER MIIKE</u>: No, that's a given. It's just that from the discussion we've had in the past, it's clear that there is surface water upstream, but they don't get down. So where are they going?

<u>COMMISSIONER KAGAWA-VIVIANI</u>: I have a question for Commissioner Miike then, because in the Code, ground water designation and surface water management area designation are in separate pieces. Should that be considered together?

<u>COMMISSIONER MIIKE</u>: I'll send you the specific pages from the Waiāhole decision, where the Supreme Court directly addressed that. What they said even though there are separate sections in the Code for ground water management and surface water management, when the two are interconnected, if you designate one, the other side is subject to the permit conditions.

<u>CHAIR CHANG</u>: To protect us, I think Ciara is right, that we better make sure we have a very good administrative record documenting that connection, as well as ensuring that those users are also given due process and notification of the water designation process, and they may fall under. It doesn't necessarily mean they won't be permitted to continue, but they do have to be part of the process.

<u>COMMISSIONER MIIKE</u>: There will be just an existing use that has to meet the existing use requirements. One other thing is that I was very surprised when the Board of Water Supply said that they deliver half of the water to the Wai'anae area from the outside and I wonder why haven't we designated this so long ago? If their current amount of water, you can't even meet half.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: Try to read their petition. There's some good history in that document about...

<u>COMMISSIONER MIIKE</u>: There's a long history of stuff being ignored by this Commission, and I will say that, having been a member of this Commission. This is my 14th year now.

<u>CHAIR CHANG</u>: You have to admit, this Commission is much more [inaudible].

<u>COMMISSIONER MIIKE</u>: Oh yeah, that's why I'm happy to have this Commission. Not just the Commission, but the director, the chair.

<u>CHAIR CHANG</u>: We actually do have a really good body, but we also have good staff. I greatly appreciate the work on the staff.

<u>COMMISSIONER KATAYAMA</u>: I guess just a clarification on Larry's point. Can you identify the materiality of that connection of ground and surface? Not today, but in findings of fact.

<u>DEPUTY KAHAHANE</u>: As far as the materiality, the quantity of recharge that is estimated to come from those streams, perhaps?

<u>COMMISSIONER KATAYAMA</u>: However you define materiality. Just for Larry's point of view.

<u>COMMISSIONER MIIKE</u>: Yes. Part of that also is that you have streams up there. They don't reach the ocean, so unless they're being artificially diverted totally, to me that, without having to say about how much of the water is going down, which may be difficult to show. As long as you show a direct connection.

<u>COMMISSIONER KATAYAMA</u>: I guess since there are two sections in establishing water management areas, to establish that nexus that there is connection, connectivity. I think you need to also sort of identify materiality of that connection.

<u>COMMISSIONER MIIKE</u>: Yeah, but it's not in the Code. The Code does have separate criteria.

<u>COMMISSIONER KATAYAMA</u>: No, but I'm saying that as part of making that nexus, saying that if we're designating water management, it's everything or just this portion. Because right now, the petition before us is ground water. What we're seeing is that the ground water is being affected by surface water not reaching.

<u>COMMISSIONER MIIKE</u>: We need that and also as a reference to the Supreme Court decision that said exactly what I was talking about.

COMMISSIONER KATAYAMA: It stands to reason.

<u>DEPUTY KAHAHANE</u>: To the extent that if you have a losing stream that is recharging the aquifer, that we are basing our sustainable yield on recharge, right? Anytime that you're diverting water from a losing stream, you are affecting how much recharge is going to sustainable yield. So, when we talk about these criteria for designation and withdrawals as a percentage of sustainable yield, perhaps, we are embarking in some interesting territory. Based on the Waiāhole decision, there is a basis to say that diversions, especially from losing streams can impact ground water resources.

<u>COMMISSIONER KATAYAMA</u>: That's pretty clear.

COMMISSIONER KAGAWA-VIVIANI: Can I weigh in? I've actually spent some time on BWS property, working in Mākaha. But there are other places where there are losing streams and it is complex, but there's good references. One thing that's known in hydrology is maybe doing lo'i restoration in the upper reaches of a valley actually increases recharge. Ayron maybe has references. I'm familiar with some from Wai'anae maybe, not really published studies, but elsewhere that highlight the mechanism of those connections where surface water recharges the aquifer. That happens on Maui and then where ground water pumping affects the stream, so that's demonstrated in different places. I think it's really zeroing in on the materiality of that connection. There's good references.

<u>COMMISSIONER KATAYAMA</u>: Yeah, that's step nine actually, we're at step four.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: Yeah, and then that will be part of the findings of fact, part of the independent research that the Commission does. I think how that meets, HAR 13-171, I don't know, but there are smart people to hopefully make that clear.

<u>CHAIR CHANG</u>: We're still at the, do we accept the petition or not? So these are really good kind of questions, but sort of redirecting it back to the question before us. Because it is very clear that these issues that have been brought to light for us to fully satisfy the designation process, making sure that the record is complete, but that is probably going a little ahead of ourselves. I'm going to pull this back.

BARRY USAGAWA: We reiterate our support.

PUBLIC TESTIMONY - None

20250520 03:44:24

MOTION: (KATAYAMA / MEYER)

To approve staff recommendation as submitted.

UNANIMOUSLY APPROVED

(HO/MIIKE/MEYER/KATAYAMA/CHANG/SPRINGER/KAGAWA-VIVIANI)

20250520 03:45:29

B. ACTION ITEM

4. Approval Of Well Construction Permit for Waimea Deep Monitor Well (Well No. 8-5849-008), TMK (3) 6-6-002:041 Waimea Aquifer System Area, at Lālāmilo, South Kohala, Hawaii

PRESENTATION OF SUBMITTAL: Ryan Imata, Ground Water Regulation Branch Chief

QUESTIONS / COMMENTS

<u>COMMISSIONER SPRINGER</u>: It's not a question per se, but I noticed in the various Ka Pa'akai o Ka 'Āina analyses that we looked at, there's often a focus on historic properties as compared to practices. I understand this is a small parcel of property, so it wouldn't necessarily come up, but I hope that we can encourage a deeper discussion of practices as compared to properties. Thank you.

COMMISSIONER KAGAWA-VIVIANI: I had a similar comment, and I think it's just in general with wells and ground water. The focus is on the subsurface and sort of what's on land is a little bit secondary. When I saw the notes, staff didn't interview traditional and customary practitioners in the project area, it's one thing to look at an AIS, but even just with BWS looking at Wai'anae, you could consult oral histories as secondary sources. Interviewing is time-intensive, demanding for everybody, and is a primary source, but there are secondary sources that can be drawn upon and cited. Because material culture, archeology is one thing, but living practice is another. I think there's testimony to that effect too. I think it's just a way to show that we're doing our due diligence on the Commission when we're considering what concerns are for the area and the implications with the well. We have to think about the different users and how they see the landscape, not just whatever records. There is a wealth of oral history resources. I don't know if they're centralized or compiled, but maybe strengthening Commission staff awareness of those and really not saying that they're not there, but we looked, here's the key references and having that basis. It's more of a comment.

<u>RYAN IMATA</u>: I should note that we consulted with 'Aha Moku and Leimana is here to provide any kind of feedback or answer any questions for you guys.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: I'm saying this as a university researcher too, like when you go and interview, it's always good to do some homework first. And so, to the extent that that can be done, it's just showing that you're doing your due diligence. Thank you for the submittal. It answered a lot of the questions.

CHAIR CHANG: That might actually be a question posed to SHPD that when they do their assessment, they are primarily focusing on historical properties, but they also have an inventory of ethnographic studies based upon a TMK. We should maybe expand with SHPD to request that when they do provide comments, at least to provide a bibliography of resources because Pu'ukoholā is not too far away from them. There are sites and if we look at things in an ahupua'a, then it's probably, what's within that scope of that ahupua'a. I think the comments are well taken that there are available resources that may not necessarily require a lot of additional time, but just asking maybe SHPD as part of their submittal to also look at cultural resources as identified, or at least additional resources of ethnographic studies or other archeological work that may have been done in the vicinity, at least within the ahupua'a. But that's probably a guidance beyond just this submittal, but in general. Maybe we'll take that back to SHPD as part of their review process. Because they are generally focusing on archeological and historic, but not cultural practices as a whole. Traditional and customary practices, we are primarily focusing on practices, not necessarily historic resources, or archeological resources. So yes, those are well taken comments that I think we could address internally from our SHPD reviews.

<u>RYAN IMATA</u>: I wonder if you can give us some guidance maybe, because typically we have the applicant fill in the 6E form and then we draft our letter of no historical properties impacted. Do you think that we should engage them separately from the 6E?

CHAIR CHANG: I think maybe we should engage SHPD or the applicant should include when they, because usually it's being done by TMKs. The TMK should also include what's the ahupua'a. If you have a specific TMK within an ahupua'a, but we should ask SHPD to look at the broader ahupua'a. Not necessarily to identify all of the resources, but maybe doing an ahupua'a research, and then coming up with the bibliography of additional, especially if there's an ethnographic study. Those are usually of oral histories. Maybe we can ask SHPD to expand. Again, they don't have a lot of capacity, but if we give them at least a TMK and the ahupua'a, they may be able to follow up and facilitate their review process. I think those would be helpful kinds of information as we are looking at traditional and customary practices. The SHPD review is generally dictated by chapter 6E. Traditional customary practices is beyond chapter 6E. It is looking at more testimony or comments from those, kind of like what 'Aha Moku brings forward to us,

who are the descendants from the area, what are the practices. We'll have to figure out internally how we do that. That's probably something that we need to look at as a whole.

<u>COMMISSIONER SPRINGER</u>: And a comment, just as Waiāhole informs how we treat the Water Code, Ka Pa'akai o Ka 'Āina informs how we treat 6E. I have another question. Given the proximity of the well to the 'Anaeho'omalu water unit, are they intermingling? What are we monitoring? Are we monitoring Waimea or Waimea and 'Anae?

<u>RYAN IMATA</u>: We manage in terms of the boundaries. I think the data that we get from Waimea, we'd apply strictly to Waimea. Although, I think your point is that the geographic boundaries sometimes don't really mean that much. Sometimes there are boundaries that the geology could be representative of 'Anaeho'omalu, right? I think we'll use it understanding that there is that possible connectivity between the two.

LEIMANA DAMATE: Aloha, members of the Commission. Aloha, Hannah. I just wanted to say that 'Aha Moku stands on our written testimony as submitted, but I'd like to also address the cultural practices with that specific area. I spoke to some of the generational people. You would know them, which is Case 'Ohana, Kinney 'Ohana and they did not particularly want their names on the testimony, but they did give me permission that if the board needed to talk to them, I could give you their contact information. Normally I would put it on the testimony, but they were a little bit nervous about that. They did give me the information that I put in the testimony. I just wanted to let you know. Lloyd. I also wanted to stress that of anybody in this room that knows Ka Pa'akai really well, it's Commissioner Springer. When she asks questions about it, she's asking specifically for reasons that I would enjoy answering.

<u>CHAIR CHANG</u>: I think we look at 'Aha Moku based upon the statute as the entity that does provide DLNR information regarding traditional and customary practices in relationship to a specific project or a proposal before us. It is always helpful to get 'Aha Moku's, at least identification of resources in the area that may help guide us in making a decision.

<u>LEIMANA DAMATE</u>: Yes, and in this particular case, Chair, that's my hometown. The kūpuna that I consulted with, I grew up there and the cultural practices that we enjoyed at Hāpuna Beach, those are the areas that I based my own family history on. Just so you know.

<u>CHAIR CHANG</u>: For me, it's always helpful. I know in your testimony is the gathering of limu, 'opihi and other marine life. To me, the specific identification of what are those traditional and customary practices, in my mind, are relevant when we do Ka Pa'akai for purposes of identifying, are there appropriate mitigation measures that we should be

conditioning any project on? It is helpful when there is at least the identification of the resources. That to me is the first step of Ka Pa'akai.

LEIMANA DAMATE: I knew she would ask. Thank you, Chair.

<u>DEPUTY KAHAHANE</u>: I just came up to express my appreciation to Leimana for doing this. I know next time we will provide more notice, but this has been very helpful. She worked hard to get us the testimony to support her decision today. I just wanted to express some appreciation for Leimana and her hard work.

<u>CHAIR CHANG</u>: We have come to really to appreciate Leimana on behalf of the 'Aha Moku, providing us relevant testimony, so thank you.

PUBLIC TESTIMONY - None

20250520 04:03:23

MOTION: (MIIKE / SPRINGER)
To approve staff recommendation as submitted.
UNANIMOUSLY APPROVED
(HO/MIIKE/MEYER/KATAYAMA/CHANG/SPRINGER/KAGAWA-VIVIANI)

20250520 04:03:58 – Lunch; Commissioner Ho left meeting

20250520 04:45:33

C. NON-ACTION ITEM / INFORMATIONAL BRIEFING

2. Briefing by Deputy Director Kahahane – Tracked State Legislation Related to the Commission on Water Resource Management for the 2025 Legislative Session

Passed Bills

- a. **HB300 HD1 SD1 CD1** *RELATING TO THE STATE BUDGET*. Appropriates funds for the operating and capital improvement budget of the Executive Branch for fiscal years 2025-2026 and 2026-2027. (CD1)
- b. **HB505 HD1 SD2 CD1** *RELATING TO RED HILL*. Establishes a WAI Policy Coordinator for coordination of Red Hill WAI initiatives. Creates the Red Hill Remediation Special Fund. (CD1)

c. **HB969 HD2 SD2 CD1** – *RELATING TO WASTE OR DISPOSAL FACILITIES*. Prohibits landfill units on land in an agricultural district with class A soils in a county with a population greater than five hundred thousand. Beginning 7/1/2025, narrows the prohibition on constructing, modifying, or expanding waste or disposal facilities within a one-half mile buffer zone of residential, school, or hospital property lines to apply specifically to landfill units or components of landfill units. Beginning 7/1/2025, prohibits the construction, modification, or expansion of a landfill unit, or any component of a landfill unit, inland of an underground injection control line in a county with a population greater than five hundred thousand, with certain exemptions. (CD1)

d. **SB1602 SD1 HD1 CD1** – *RELATING TO THE KEAUHOU AQUIFER SYSTEM.* Establishes the Keauhou Aquifer System Monitoring Pilot Project. Requires the Department of Land and Natural Resources to determine whether to continue, expand, or end the Pilot Project. Appropriates funds to the Department of Land and Natural Resources for the Pilot Project. Requires reports to the Legislature. (CD1)

Passed Resolutions

- e. **HCR128 HD1** *REAFFIRMING THE STATE'S OBLIGATION TO UPHOLD THE CONSTITUTIONAL RIGHTS OF ITS PEOPLE BY RECOGNIZING THE CRITICAL ROLE OF FRESHWATER IN MAINTAINING HEALTHY NEARSHORE MARINE ECOSYSTEMS.*
- f. SCR54 SD1 HD1 REQUESTING THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONVENE AND PROVIDE ADMINISTRATIVE ASSISTANCE TO A DESALINATION PLANNING TASK FORCE TO DETERMINE WHETHER THE USE OF DESALINATION FOR LARGE-SCALE WATER CONSUMPTION IN THE STATE IS FEASIBLE.

Unsuccessful Bills

- g. **HB306 HD2 SD1** *RELATING TO STATE WATER CODE PENALTIES*. Adds a minimum penalty and maximum penalty per violation of the State Water Code and authorizes the Commission on Water Resource Management to consider each day that a violation exists or continues to exist a separate offense. Establishes factors the CWRM must consider when determining the amount of the penalty. Increases maximum fines every five years from 2030 to 2045. Effective 7/1/2040. (SD1)
- h. **HB510 HD1 SD2** *RELATING TO DECLARATION OF WATER SHORTAGE AND EMERGENCY.* Amends the conditions, manner, and areas in which the Commission on Water Resource Management can declare and provide notice of water shortages and emergencies. Limits the duration of a water shortage

declaration to ninety days. Limits water usage restrictions imposed on a permittee or owner and operator to twenty per cent of the permittee's or owner and operator's last reported monthly use. Requires CWRM to maintain a list of names and postal or email addresses of persons who request notification of a water shortage declaration and send them a copy of a notice of a water shortage declaration whenever water shortage is declared. Effective 7/1/2040. (SD2)

i. **SB438 SD2 HD3** – *RELATING TO WASTE DISPOSAL FACILITIES*. Prohibits landfill units on land in an agricultural district with class A soils. Beginning 7/1/2025, narrows the prohibition on constructing, modifying, or expanding waste or disposal facilities within a one-half mile buffer zone of residential, school, or hospital property lines to apply specifically to landfill units or components of landfill units. Beginning 7/1/2025, prohibits the construction, modification, or expansion of a landfill unit, or any component of a landfill unit, inland of an underground injection control line in a county with a population greater than five hundred thousand, with certain exemptions. Effective 7/1/3000. (HD3)

PRESENTATION GIVEN BY: Deputy Ciara Kahahane

QUESTIONS / COMMENTS

<u>COMMISSIONER KATAYAMA</u>: Are these line budget items fixed, or do you have any flexibility to it?

<u>DEPUTY KAHAHANE</u>: We have flexibility to move within these line budget items. However, I would be highly reluctant to take the money that we've been given for specific things, specific line items by the Legislature.

<u>COMMISSIONER KATAYAMA</u>: Especially for joint projects like with USGS. We had sort of a three program with Maui County, us, and them. If they can't quite fulfill their portion, what's plan B?

DEPUTY KAHAHANE: If they can't fulfill their portion, we will have to either scale back the monitoring program, or we'll have to fill in from our other funding. These are just the budget increases that we have. We do have other operating funds, general funds, and special funds that we can use to supplement any shortfall that would be caused by a reduction to USGS. Their contribution to our annual funding agreement is something like \$200,000. It's not an astronomical amount of money that we would have to make up. But in any case, this increase will, whether we use it just to maintain the current state of our monitoring program, given impacts to USGS, or whether we're able to expand the monitoring program is the real question that will be answered as the federal budget becomes clearer.

<u>COMMISSIONER KATAYAMA</u>: Do you have a sense of what the UH funding is related to federal sources? Like their programs, like Tom's program, how much federal money does he get?

<u>DEPUTY KAHAHANE</u>: All I know is specific to the Mesonet program, their total operational cost of \$600,000 a year. Approximately \$240,000 of that comes from National Science Foundation. I am ignorant as to other federal funding received by UH.

<u>COMMISSIONER KATAYAMA</u>: Just relative to what we're focused on.

<u>DEPUTY KAHAHANE</u>: Yes, for the Mesonet program. If they lose that funding from NSF, then they're going to have about a \$240,000 shortfall that they need to make up from other sources.

COMMISSIONER KATAYAMA: Would we be the other source?

<u>DEPUTY KAHAHANE</u>: Given the decrease to our request this year, we would be able to contribute about \$350,000, maybe more. We can help, we can contribute more than half, but I'm not optimistic that we can contribute 100%, and they'll have to seek other contributions from either county or private sources.

<u>COMMISSIONER KATAYAMA</u>: This is sort of not focused on this, but if there is a special session, are there funding bills related to our projects that could surface there? Or is it all our bills are dead?

CHAIR CHANG: The primary focus of the special session will be on the federal impacts. I've got Historic Preservation division, we're losing all of our federal funds. We're losing four positions. Priority is keeping the warm bodies. If we're taking on anything new, but I think if there's a special session, it will be to look at, because there's still some uncertainty about federal cuts that we're hoping that within the next, I think if they reconvene a special session, they may be looking at September, October, which may give them a better idea after the federal reconciliation bill. After Congress passes, then we'll know for sure the status of these federal impacts. But we have been collecting since DOGE and the federal cuts have been made.

All of the divisions, all the departments have been collecting information about potential federal impacts. I will share with you our DOFAW with our US Fish and Wildlife, we're losing millions. No one's getting cut. Everybody's, DOH, Department of Ag. There's a tremendous amount of potential cuts to human services. I think the governor's office has got a priority of public health and safety. Some of these others, if we can find other sources, but I am not as optimistic that we're going to be able to put into the special session our Mesonet project. I think it may just be a temporary, we scale back and then

once we get greater certainty on the funds, we may be able to reestablish at least the same level of funding.

<u>COMMISSIONER KATAYAMA</u>: Well, once you lose intellectual capital, it's hard to restore.

COMMISSIONER KAGAWA-VIVIANI: I think one thing that's hopeful is like for Mesonet, they got like a big grant from NSF for equipment. So, they've been in an equipment deployment mode, which is very resource intensive. There's like flying and personnel needed. I don't know what their horizon is for finishing, but it'll enter, a different, more maintenance phase. That's where actually the value to us is, is that long-term maintenance and maybe things will be clearer. I was curious about how we are strategizing or if and how we can strategize about how to do the same or more with less, because if it's not here right now, it's coming. I assume, given the lack of, or given losses of sort of federal partners. It kind of goes back to your question earlier about strategic planning, is how can we help contribute to that? Sort of thinking about how we plan for the present future, very different resource landscape.

CHAIR CHANG: It's not just CWRM, I have challenged all of our divisions. We have to start generating our own revenue. Whether it's registration fees, whether it's, you have a permit, you have an annual permit fee, renewal fee, but we do have to start looking at, one, how do we generate sufficient revenue? But there is also, and to your point, Aurora, for example, we had a period of time in 2022, DLNR got a huge infusion of, this is when we had a budget surplus under the Ige administration. DLNR invested in equipment. We've tried to build an infrastructure, so now we're working with our community partners. At least we've got the infrastructure in place. At least that was the strategy at DLNR, is how do we invest in building an infrastructure and then expanding that so we can build in community partners, NGOs, nonprofits, to help with the manpower to do some of the things. But at least we're trying to invest in just purchasing equipment and supplies and infrastructure. We're all going to have to learn how to do more with less or greater collaboration with our partners. NGOs are going to have to step up more to fill those gaps too.

<u>COMMISSIONER SPRINGER</u>: I was going to say at home, we found golf courses, for example, a great source of weather data because they monitor rainfall on their golf courses and how they balance their water budget. We've been able to collaborate with them in Ka'ūpūlehu, we're able to bring their weather data into our use. We did get a Mesonet station at Pu'uwa'awa'a. I'm wondering if that funding, that \$600,000, is that for expansion or is it for maintaining?

<u>DEPUTY KAHAHANE</u>: That is for maintaining the fully built system.

COMMISSIONER SPRINGER: Which is not yet fully built?

<u>DEPUTY KAHAHANE</u>: It's not yet fully built. I think all told, it'll be 109 stations. They're at, I'm not sure how many, 60 something.

<u>COMMISSIONER SPRINGER</u>: Strategically placing them too because our unit is at the top of Pu'uwa'awa'a, so it has a great vantage point into Pōhakuloa and across Pōhakuloa. We can pick up, there was just a 75 mile an hour wind event a couple of weeks ago, and from our vantage point it was able to survey the land and get some good data. So even strategic planning, you can only build a few, optimize the locations.

CHAIR CHANG: We're having to reprioritize. After Lahaina, DOT was able to help DOFAW purchase, what were they called, RAWs? We got a tremendous amount of investment in RAWs. I think we got something like 40 of them, and we only had like 10 per month. I think what you're suggesting is, okay, if we've got less, let's strategically plan where's the best location for them. I think everybody's trying to be smarter with less, trying to be more strategic, knowing that we don't have any fat here. We really have to work on utilizing what we've, but more importantly, and this is a good thing too, collaboration. So, where we've got Mesonet, and then when we've got RAWs, maybe we, let's look at expanding so that we're looking at data collection by multiple means, and to fill up the gap. Divisions or agencies are doing a lot more talking. We have a drought council, NOAA- they're just not going to exist. That is frightening, the thought of we're not going to get real-time data on critical conditions.

<u>COMMISSIONER KATAYAMA</u>: Chair, is your thought that you will formalize a process of how we generate revenue?

<u>CHAIR CHANG</u>: Hopefully everybody's looking at rulemaking so that we can start-do we need rules to charge fees? Can we do that administratively? Each of the divisions have been charged, and I know CWRM is looking also at, will monitoring permits, all the permits that we issue, can we charge an annual registration fee, at least to enforce the conditions that we have and monitoring.

<u>COMMISSIONER KATAYAMA</u>: So, you would go through a rulemaking process?

<u>CHAIR CHANG</u>: If we have to, so either we're exploring, if we're required to make rules, let's start doing the rulemaking. If we can do it administratively because we have existing rules, then we're looking at doing that as well. Some of these are low-hanging fruit, but you know that every time government tries to charge fees, you get such resistance, right? I mean, nobody wants to pay for that. But we are exploring that as a real viable option because it is appropriate that those who are using the resources contribute to the process.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: Can we rebrand it as investing in public goods? Like it's not a fee, you're investing in our economies of scale.

<u>COMMISSIONER KATAYAMA</u>: Well, the devil is always in the details, right?

<u>DEPUTY KAHAHANE</u>: It is, yes. And we've had preliminary discussions at the tail end of last year with the counties in particular about the proposed fee would be directed towards well owners and operators and operators of stream diversion works. We didn't encounter perhaps as much resistance as I anticipated. One of the major concerns was that if a fee is being paid that it be used to support the Commission's operations in the specific area. If Maui or Hawai'i Island is paying a fee, we're not taking that and using that for our O'ahu operations perhaps. That is an ongoing conversation that I expect to have now that we have a little bit of time in the down season so that we can work on a program for hopefully next session.

<u>COMMISSIONER SPRINGER</u>: To the extent that we may be able to generate a pilot program, again, looking at home and Ka'ūpūlehu with our fisheries management plan and permitting components that we're looking at by having this as something that can then be presented in other places. For example, we have Roi roundups and we get the skeptics to come in and look at how the fishery is recovering. Then pretty soon they're able to have conversations that they were incapable of having previously.

<u>CHAIR CHANG</u>: I think that's a good strategy. So much of this is education and once people understand, they seem to be much more willing to participate.

<u>COMMISSIONER SPRINGER</u>: Having conversations with people and I think we're at a tipping point where the communities may be able to see where they stay in the process, where before there was resistance to that.

<u>CHAIR CHANG</u>: The reality check is everybody has to participate, right? No free ride anymore.

20250520 05:10:59 – Deputy Kahahane resumes presentation

<u>COMMISSIONER SPRINGER</u>: So Keauhou might serve as that demonstration spot that we were talking about earlier.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: We have the budget, but that's for deep monitoring. We have a mandate here.

<u>DEPUTY KAHAHANE</u>: Speaking of budget, we received as part of this bill \$200,000 a year operating.

COMMISSIONER KAGAWA-VIVIANI: It is not an unfunded mandate.

<u>DEPUTY KAHAHANE</u>: It is a funded mandate. Many thanks to the area legislators. That \$200,000 will be able to go a long way towards helping us stand up this pilot project, fund any equipment that we might need to put in there, sensors or anything, and to engage with either staff or with a consultant to do this ongoing outreach and synthesize the information that we're collecting.

<u>COMMISSIONER SPRINGER</u>: Just the thing about Keauhou, it's a huge landmass. The size of it, it doesn't have that many users in it, so to get cooperation and consolidation of thinking and action would be easier than some other places.

CHAIR CHANG: We hope.

DEPUTY KAHAHANE: I'm glad you think so.

COMMISSIONER SPRINGER: It's true!

<u>COMMISSIONER KAGAWA-VIVIANI</u>: From someone who is knowledgeable.

<u>COMMISSIONER SPRINGER</u>: We've talked a little bit about the study group that Charlie Young from 'Aha Moku has convened around the Ota Well. Everybody that you would want to have in a conversation, that I can think of, is in the conversation from kama'āina to 'Aha Moku, DHHL, Lili'uokalani Trust, Kamehameha Schools, the County Water Department. We're all there and we're all chatting at NELHA, so Natural Energy Lab Hawai'i, is where we meet.

DEPUTY KAHAHANE: I want to jump in.

<u>COMMISSIONER SPRINGER</u>: Charlie is waiting for your call.

20250520 05:17:11 – Deputy Kahahane resumes presentation

COMMISSIONER SPRINGER: So again, going home to Kaʻūpūlehu and given what Commissioner Viviani was talking about the salts or the chlorides. In Kaʻūpūlehu, we got crazy water. Even the groundwater has to be treated reverse osmosis, so they're also looking at desalination there. There might be some good technology coming out of both Kaʻūpūlehu at Hualālai Resort and Kona Village Resort and neighboring Kūkiʻo for some of these techniques that it's the most expensive real estate in the universe. They're making some advances there.

<u>DEPUTY KAHAHANE</u>: Excellent. Good to know as we look into convening this task force.

<u>COMMISSIONER KATAYAMA</u>: Has this been funded?

<u>DEPUTY KAHAHANE</u>: Nope. We're doing more with less.

<u>COMMISSIONER SPRINGER</u>: If you're able to engage with this community and that sector of it, there might be some funding there.

DEPUTY KAHAHANE: That is a very good point.

<u>COMMISSIONER SPRINGER</u>: [inaudible] did a lot of their hydrology and he's helped me so much with understanding the dynamics of our aquifers at any rate. He might be a good one to call. I'm here to help.

20250520 05:21:45 – Deputy Kahahane resumes presentation

<u>CHAIR CHANG</u>: My recollection is that the opposition came from the ag industry. Was it the Farm Bureau?

<u>DEPUTY KAHAHANE</u>: I'll say this for the Farm Bureau. I had some good conversations with them. They were very open to working with us and they were submitting comments on the water shortage bill in particular, because with ag, there's always a concern about losing your water. They did not come out in direct opposition, if I recall correctly, to the penalties bill. But we were having conversations about it and how those penalties might be shaped so that we're penalizing the right people. We're not going after mom and pop farms. We're not targeting where our food comes from. We're really targeting the bad actors who can afford to pay and may not care about a \$5,000 fine. While I know that there were concerns from Farm Bureau and from the ag folks, I will not blame them for this bill not succeeding. I don't think that the resistance came from ag.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: But they probably raised some good points that would be good to agree. Hopefully, there's a more sophisticated proposal next cycle that addresses the different users and different access to capital and how to make it tiered or otherwise and the incentive's in the right place and the consequences. I don't know how to do that, but it seems doable.

<u>DEPUTY KAHAHANE</u>: We were going in that direction. Towards the end, came up with this tier structure where those who have violated before or a violation that actually causes harm, yeah, repeat offenders, get this increased fine or penalty. I think there is room for us on the staff side as well to formalize our penalties as it stands right now. The last time that we updated our penalty guidelines was more than a decade ago. It was quite some time ago. So even if we don't get the increase that we are asking for, I think there's a lot

of work that we could do to sort of lay the foundation for an increase to the maximum by providing people reassurance that we are targeting these penalties and assessing these penalties in a way that matches with the ability to pay.

<u>CHAIR CHANG</u>: It's an evolving process because in the previous year, we had opposition from the counties. This year, you spent a lot of time last year working with the counties. The opposition, they appreciated the early outreach. So, I agree with you. I think this coming year, if we really want to move this measure forward, we now know who else we need to talk to and build those alliances and coalitions and have them review the draft legislation beforehand. It was all good.

20250520 05:25:55 – Deputy Kahahane resumes presentation

<u>COMMISSIONER KAGAWA-VIVIANI</u>: Do you have any more specifics on the shortage and emergency? You said it was ag, too. Was it the same group? But there would be different concerns for that. Like if it was fair on the cutback, because ag is often the first and they have the least, the smallest margin sometimes.

<u>DEPUTY KAHAHANE</u>: Yes, that pretty much directly tracks some of the testimony that we received from them that they're already having trouble getting by in many cases. The impact of a water shortage declaration would, in many cases, cripple these operations.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: Water shortage legislation should be able to speak to the different users and also the different islands. That's a challenge.

<u>DEPUTY KAHAHANE</u>: It is a challenge and I think for us, it would be very helpful if we had more water shortage plans already in place so that people could kind of start to understand, how is this going to affect me? Or what will the impact of this be? How long can I expect it to last? And we did try to make some of those fixes throughout the session, but I think if people are actually able to see one in place, and especially if they're able to see one in action, it'll give them more of an understanding of both why we need it and how it'll impact them.

<u>COMMISSIONER KAGAWA-VIVIANI</u>: It's less of a punitive rather than a proactive planning effort or protective measure.

CHAIR CHANG: I will share at the legislative process, people who show up, lobbyists or the testimony that they keep, makes a big difference. Generally, we're the only people who show up on our side. But on the other side, there's a lot of people. Building these early coalitions so we don't have confrontation during the legislative session. We've tried to resolve a lot of that, similar to what Ciara did with the county water departments. I think that bode well for why the bill got as far as it did because we didn't get opposition from the counties. I think it was a constituency. I will share that the ag industry did really

well in this legislative session. They were very successful. I think they were a very effective lobbying group, as well. We don't have the same kind of coalition behind us. While the bill wasn't one of CWRM, it was 1396, which included the raise, the 0.75% TAT (Transient Accommodation Tax) tax increase. There was a huge coalition of community members that supported, and they in particular supported funding going to DLNR. At the ending conference, the money will go to DLNR, our special land development fund, but all the projects will have to be submitted to the Legislature, and the Legislature will decide which projects to fund. Nonetheless, I think it was an important bill to finally get a portion of the TAT tax dedicated to environmental stewardship, which I think is very historic.

PUBLIC TESTIMONY - None

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D. COMMISSION MEETING SCHEDULE (Tentative)

June 17, 2025 (Tuesday) July 15, 2025 (Tuesday)

The meeting adjourned at 02:35 p.m.

Respectfully submitted,

'IWALANI KAAA Commission Secretary

Ille: Kame

APPROVED AS SUBMITTED:

CIARA KAHAHANE

Deputy Director

WRITTEN TESTIMONIES RECEIVED:

Please refer to the Commission website to read and view written testimonies received: https://dlnr.hawaii.gov/cwrm/newsevents/meetings/