

**MINUTES
FOR THE MEETING OF
THE COMMISSION ON WATER RESOURCE MANAGEMENT**

DATE: February 18, 2025
TIME: 9:00 a.m.
PLACE: DLNR Boardroom, Kalanimoku Bldg.
1151 Punchbowl Street, 1st Floor
Online via Zoom, Meeting ID: 824 6607 0498

Online link to the video recording of the February 18, 2025 Commission on Water Resource Management meeting: <https://vimeo.com/1058315145>

Chairperson Dawn Chang called the meeting of the Commission on Water Resource Management to order at 9:08 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, Dr. Aurora Kagawa-Viviani, Mr. Wayne Katayama, Dr. Lawrence Miike, Mr. Hinano Rodrigues, Ms. Kathleen Ho

STAFF: Deputy Director Ciara Kahahane, Ms. Katie Roth, Dr. Ayron Strauch, Ms. ‘Iwalani Kaaa

EXCUSED: Mr. Paul Meyer

COUNSEL: Mr. Colin Lau

OTHERS: Barry Usagawa – Honolulu BWS, Dr. Jonathan Scheuer – Kahālāwai Consulting; Scott Fretz – DOFAW Maui Nui

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

20250218 00:04:43

A. APPROVAL OF MINUTES

January 28, 2025

PUBLIC TESTIMONY – None

20250218 00:05:36

MOTION: (KAGAWA-VIVIANI / MIKE)

To approve minutes with non-substantive edits.

UNANIMOUSLY APPROVED

(MIKE/KATAYAMA/CHANG/KAGAWA-VIVIANI/HO/RODRIGUES)

20250218 00:06:10

B. ACTION ITEM

- 1. Request for Additional Time to Consult with the City and County of Honolulu Regarding the Honolulu Board of Water Supply’s Petition for the Designation of the Wai’anae Aquifer Sector as a Ground Water Management Area**

PRESENTATION OF SUBMITTAL: Deputy Ciara Kahahane, Barry Usagawa – Honolulu Board of Water Supply, Dr. Jonathan Scheuer – Kahālāwai Consulting

QUESTIONS / COMMENTS

CHAIR CHANG: Thank you very much. I do want to applaud you for this. I really appreciated and read through everything. I thought it was really well done, it gave me a lot more background information. I appreciated the extent of the community outreach that you did on this. I think a lot of times that’s what’s missing or it’s not as adequate, but I greatly appreciated the thoughtfulness in the report and I know that you did hold back on this given what happened on Maui and West Maui. I appreciate you acknowledging staff’s capacity and holding this back, so thank you. I just wanted to get that out.

COMMISSIONER MIKE: Several questions, but first I have to let you know that my personal opinion is that I think the whole state should have been designated as a water management area which was the original intent of the legislation.

DR. SCHEUER: Is that a motion?

COMMISSIONER MIKE: No, but it’s a preface. It shared the usual objectives with the counties, now BWS is separate from Honolulu County, so what’s the County’s position?

BARRY USAGAWA: Well from our board, they actually asked us to look into it.

COMMISSIONER MIIKE: That's your board, I'm talking about the County.

BARRY USAGAWA: I think we briefed the Council members.

DR. SCHEUER: The Council members for the area were briefed, the chair was briefed who had no concerns, the Mayor's staff was briefed by the manager and chief engineer who had no concerns.

COMMISSIONER MIIKE: Second, the Navy controls Lualualei. What's the position of the Navy on this?

DR. SCHEUER: The Navy, we made repeated efforts to reach out to the Navy to discuss this through multiple channels and never received a response to a briefing.

COMMISSIONER MIIKE: You gave chances to respond.

BARRY USAGAWA: We reached out and the Army we did, as well.

DR. SCHEUER: The Army we did and we did give a briefing to the Army who does among other things extensive natural resource management in the mauka areas of Mākua.

BARRY USAGAWA: And Mākaha.

COMMISSIONER HO: In the org chart, is the Board of Water Supply a department within the County's organization/

BARRY USAGAWA: Yes.

COMMISSIONER HO: Is that the need to go to the Mayor's office and to seek the, I think you said you were going to get letters out to the Mayor's office and others, to sort of marry the County's position?

DR. SCHEUER: The process is a reflection of the requirements in the Code itself which specifies consultation with the board, the Mayor's office, and the County Council and that applies regardless. For instance, the Board of Water Supply in Maui County is advisory and not a governing body of the Department of Water Supply, whereas in the other three counties including the City and County of Honolulu, it is administratively attached to the County, but it has legal independent authority from the Mayor's office.

BARRY USAGAWA: Our board directs the policy of the department as well as authority over rates and charges and fees, as well as hiring the manager by City Charter. By the way if I could add, we did brief our board back several years ago, I can get you the right date, 2021, but we are re-briefing them again on Monday on the 24th. Our meeting is at 2 p.m., it's televised, so just letting you know that we are doing that.

COMMISSIONER MIIKE: My understanding is the sustainable yield of ground water is being looked at with new information. Is there any impact on the Wai‘anae Aquifer on that connection and sustainable yield or anything?

DEPUTY KAHAHANE: For the sustainable yield for Wai‘anae, we’re actually looking to revise those given the updated USGS recharge estimates that we have. It’s too early to say right now what the impact on sustainable yield for Wai‘anae would be, but we do believe that there will be some impact.

COMMISSIONER MIIKE: Up or down?

COMMISSIONER KAGAWA-VIVIANI: I’ll just tell you the climate projections for leeward sides of the islands doesn’t look good.

BARRY USAGAWA: It should go down depending on how much, that’s where the impact, where we don’t know.

COMMISSIONER MIIKE: No information on hard boundaries of the aquifers are more like a management thing and not a physical thing because any idea about how that might affect it? Is the Wai‘anae Aquifer self-contained or is it all connected?

COMMISSIONER KAGAWA-VIVIANI: I’m just laughing because I think it’s well understood in the hydrology community, we have this tradition of delineating things by surface topography and elevation, but the reality is water, depending on volcanic flows, well there’s now more understanding that there’s subsurface connections.

COMMISSIONER MIIKE: That’s why I asked the question.

COMMISSIONER KAGAWA-VIVIANI: And then we overlay our jurisdictional line drawing on top of things and so we have to navigate.

COMMISSIONER MIIKE: All the more reason to have an island-wide water management area designation.

DR. SCHEUER: If I may quickly just reflect on something Commissioner Miike raised that there’s the boundary issues, but there’s also particularly in areas like Lualualei and Nānākuli, given the underlying geology of the area, there’s a meaningful difference between the sustainable yield as calculated by RAM (Robust Analytical Model) and what’s actually developable. Because Lualualei is the center of the old caldera, it’s so dense, if you were trying to extract the entirety of the sustainable yield, you’d have to have a very large array of very small producing wells which at least for municipal purposes, you’re not meaningfully able to extract that. There’s a distinction that’s discussed more in the petition about which this Commission has brought up at various times including during your designation of Windward O‘ahu distinguishing between sustainable yield and actually developable yield.

CHAIR CHANG: Ciara, what's the time period for the extension? I noticed you mentioned March, is that what you're asking for?

DEPUTY KAHAHANE: If we receive comments back from the three County entities by March then yes, we would expect to have this for action again on the March agenda. And really it's up to you since you're the chair.

CHAIR CHANG: I would prefer to give you some latitude and not to exceed an additional 60 days, like April. If we can get it in March, that's great, but everybody's got a lot on their plate right now, so I'm not sure we're going to get timely responses.

DEPUTY KAHAHANE: We would appreciate that additional flexibility.

CHAIR CHANG: As long as there's no objections.

BARRY USAGAWA: No objections.

COMMISSIONER KATAYAMA: How is the surface water going to be comprehended for us understanding the impact on ground water and designating this area as a ground water Management Area? Because in the analysis, there's non-potable water use that will be coming from ground water which is potable water, I assume. Is the total planned water use up to date? Are there other permits in progress that may not have been comprehended in the presentation?

DEPUTY KAHAHANE: I'm not able to answer that.

COMMISSIONER KATAYAMA: I mean as part of the analysis that you're going through, I think if you could add that as being fully integrative in looking at this. This analysis was quite interesting reading, actually.

BARRY USAGAWA: I can offer you some of my thoughts on that if you'd like. On the surface water-ground water interaction, it's certainly there. The streams in the back of Wai'anae and Mākaha Valley are flowing and about mid-valley they disappear and then it's dry all the way through. As far as we can tell, there's only one surface water diversion, Ka'ala Farm. There may be some other unregistered ones, small pipes that they stuck in a stream once we started to... we restored Kaupuni Stream by us actually cutting off one of our tunnels. Waia'anae Plantation tunnel has three tunnels built by a plantation, turned over to the suburban water supply.

COMMISSIONER KATAYAMA: These are horizontal tunnels?

BARRY USAGAWA: Yes, one of the tunnels we're discharging, there's a photo in there, over time from 2012 to 2019 we saw a restoration of Kaupuni Stream to basically the line section. Since then and we talk about it in there, where some of the old ancient 'auwai started flowing again and so it diverted the flow so now it doesn't go as far down, but

Ka‘ala has more water. It’s not in our discussion, we’re just proposing to designate ground water as a ground water management area, not surface water because of the very little surface diversion and it can be accounted for in the water use permits for those tunnels that eventually will have to get permitted. Understanding that in connection and by the way, it does connect. From my hydrology-geology branch, I’ve learned a few things over the years. I’m not a geologist, but the dikes are connected across aquifers because they overflow one to the other. Once they flow towards the ocean they sort of separate, but all the stream flow in the back of the valley are first from dike spillage overflow. We recognize the importance of that in the hydrology as well as traditional and customary practices there. We tried to incorporate them as much as we could there.

COMMISSIONER MIIKE: It brings up an issue for me that’s over 25 years old and that is in the Waiāhole Case. The court had said that we can regulate surface water on the Windward side because there was an undisputed connection between the streams and ground water. So a ground water management designated area says we regulate both, however the attorney generals at that time said, no we have to designate and I said that’s clearly not what the Supreme Court has said. Since that time we still have not regulated surface water in the Windward side. If this comes up and there is from what you say an undisputed connection, then to me if the Commission designates to ground water management area in this area, we have the authority to regulate the surface water also. You don’t need to designate surface water, but that’s an issue that we have to decide because previous Commissions and the attorney general has punted that issue.

BARRY USAGAWA: Thank you for sharing.

COMMISSIONER KAGAWA-VIVIANI: It occurs to me that in terms of designating ground and surface together, we started probably with the hardest cases on Maui and then have been mired. I think Wai‘anae in some sense would be simpler in some ways because there’s less users to figure out how to do that ground water management with an eye to surface water. I don’t know if that’s managing surface water like designating surface water as well or legally pushing the envelope on what you said following Waiāhole, but I think if the Commission is trying to be more holistic in understanding that ground water feeds stream base flow and that I just know personally everybody often blames the board for when the stream dries up in the summer in Wai‘anae and Mākaha in particular. Maybe this is a really good space to improve our skills on the Commission side with managing those together. I don’t know if there are thoughts on that from staff or other Commissioners.

COMMISSIONER MIIKE: Just one last comment, if you go back and read the Supreme Court decision on the Waiāhole case, they pointed out that the Commission itself has said that there was a connection between ground and surface water and that they had the authority to regulate both if one or the other was designated as either ground or surface water. And yet, the attorney generals at that time said, no we have to designate and it’s been sitting like that for that long. The problem with a decision such as this is the Supreme Court doesn’t have anything to say unless the case comes back to them and so it’s been sitting like this all this time. I think at least my preference is if we go into the

designation, we should address the surface connection and make a decision and that I think would take us back to Waiāhole and we should be regulating surface water diversions there a long time ago. One of my pet peeves about past decisions.

CHAIR CHANG: Barry, is there a reason that your petition is not for designation of surface water?

BARRY USAGAWA: As I was saying, it's not like there are flowing perennial streams that have a lot of diversions in need of management, some are taking more than others. There's very little stream flow only in the back of the valley and one diversion.

COMMISSIONER MIIKE: But you said that it's probably disappearing into the ground before it gets lower down, right?

BARRY USAGAWA: Before it gets to mid-valley, yeah. We have photos of that.

COMMISSIONER MIIKE: It seems to me that's a de facto proof there's a connection between the two.

DEPUTY KAHAHANE: This is something that we have discussed as staff. Based on the link between ground and surface water, there are two things that we could do. We could proceed as Commissioner Miike mentioned as contemplated by the Supreme Court in Waiāhole 1 and regulate surface water in Wai'anae based on the ground water management area designation or we've also discussed designation of the ground water management area doesn't necessarily preclude us from acting on our own recommendation as the Commission to designate as a surface water management area in addition.

CHAIR CHANG: Would it require any additional facts or that the application be changed in any way if we are talking about designating both surface and ground?

DEPUTY KAHAHANE: On the current petition there is some discussion of the interaction between ground and surface water, so we would likely want to do our own independent investigation of the surface water needs in that area.

BARRY USAGAWA: And if I may too, it's unmeasured. There's one old stream gauge in Mākaha that no longer flows and there's none in Wai'anae. In terms of trying to quantify that, you wouldn't have the long-term record to determine that, but we feel that it would complicate things certainly if you add surface water. What is the most efficient way that we can get it designated? The rest of the island is all ground water, not surface water and in the conditioning of those sources that are in the dike, accounting not only for use but that interaction is a way, I think it's to your point Commissioner Miike. There's a way to do that.

DR. SCHEUER: If I may, we all recognize even though the Code itself and some of our case law differentiates between surface and ground water, we understand it's all

hydrologically connected both from a cultural perspective and a hydrological perspective; these are not separate systems. There are separate criteria for surface water designation in the Code as opposed to ground water but just the brief review of those three criteria- whether regulation is necessary to preserve the diminishing in surface water supply for future needs goes on whether diversions of stream water are reducing the capacity of the stream to assimilate pollutants or serious disputes respecting this use of surface water are occurring. I think if it was a staff initiated process, there would be substantial information in our petition that would support the staff's analysis to argue that those criteria were met, but the briefest answer, and Barry can correct me if I'm incorrect, why we didn't petition for both is because the board withdraws ground water and not surface water. It was clearly within the kuleana of the board to step forward and ask that this source that they depend on be regulated, a related but not fully within the realm of the board's kuleana to try and also ask for surface water designation...versus West Maui where the Maui County Department of Water Supply depends on surface and ground water for potable uses.

COMMISSIONER MIIKE: My preference would be to address the ground water management area designation and if that goes through we can, as separate action, say that there is enough evidence or we have a hearing about evidence about the connection and say that ground water management area designation also means we can regulate the surface water management area. Then if you want to take the long view and go and then say, let's start a designation of the surface water management area, we can do that too. From my point of view, we can separate that and move ahead with this but then have a parallel track to regulate the surface water so we don't complicate the issue here.

CHAIR CHANG: Interesting, I guess my question is is there a notice issue if we're not including surface water as part of the designation when we have to get all the water permit applications in? Does it make a difference at all?

COMMISSIONER MIIKE: May I? What I'm saying is that if from my understanding of this Waiāhole decision is correct, we can go ahead with the ground water management area designation and not address the connection. But once we do that we can then move forward and say that information concludes it or enough that we can say that we can regulate surface water under the ground water management area designation.

DR. SCHEUER: Chair Chang, is your question about whether somebody who has an existing use of surface water was getting sufficient legal notice that their uses might be curtailed?

CHAIR CHANG: Yes.

DR. SCHEUER: I think off the cuff, the one Hawaii Supreme Court case on designation was Ko'olau Ag and one of the issues that was raised in Ko'olau Ag was that Fred Trotter guys tried to contest the designation of Windward O'ahu as a water management area and the Supreme Court said in their decision, your rights are not actually affected it just sets up a regulatory scheme. Based on that, if this Commission was to go in the direction that Commissioner Miike is suggesting is take up the ground water designation, focus only on

that, then subsequently regulate surface water as part of that and/or designate surface water, it's not actually implicating anybody's actual rights. It's just setting up a regulatory scheme over those uses, at least per the Supreme Court.

CHAIR CHANG: Okay, many issues that need to be...as we go down this track.

COMMISSIONER MIIKE: Water is complicated.

CHAIR CHANG: But I also think it's integrated and from a culture perspective it is one and the same.

COMMISSIONER KATAYAMA: It's all just downhill.

DR. SCHEUER: Uphill towards money and power.

COMMISSIONER KATAYAMA: You haven't been on a farm.

COMMISSIONER KAGAWA-VIVIANI: I was reflecting with Nā Wai 'Ehā and 'Īao, it went from surface water then kind of adding ground. Here, we're kind of taking the opposite direction and given that, and I don't think in Q90 and Q50 and all, but in thinking of how we manage surface water flows a lot of that is really shaped by the ground water base flow. I think that does seem like a way to address this designation in bite size. There are some comments there, that's my naive kind of take.

DR. SCHEUER: If I may, just factually the sequence of things in Nā Wai 'Ehā was first designation of the 'Īao Aquifer as a ground water management area and then the attorneys with Earthjustice argued that under Waiāhole, the Commission had sufficient power to now regulate surface waters and issue a surface water permitting scheme for the related waters. The Commission said, apparently on the advice of deputies attorney general, that no, they had to do a separate petition for designation and so then Earthjustice on behalf of Hui o Nā Wai 'Ehā and perhaps some other clients petitioned for surface water designation of Nā Wai 'Ehā to address the specific issue that Dr. Miike was raising.

COMMISSIONER KAGAWA-VIVIANI: I apologize for my incorrect statement, thank you for clarifying.

CHAIR CHANG: That's a good analogy, I appreciate that as well.

COMMISSIONER KATAYAMA: I think it'll be very helpful for staff's analysis to comprehend the surface water impact, especially for non-potable use as identified in the petition. What's left over from that becomes affecting the ground water recharge rates and I think that would be foundational for us to take the next step.

DR. STRAUCH: Ayrton Strauch with the Stream Protection and Management Branch. Staff had contemplated establishing an interim instream flow standard as early as 2016 and we've been monitoring Kaupuni Stream or one of the tributaries below the release

from Tunnel 19 in anticipation of establishing an IIFS. The Commission has also added a USGS gaging station on Kaupuni Stream three years ago. That's a continuation of a discontinued station, so we have a Water Commission station that's been active for 10 years and now a USGS station that's been active for multiple years. We are looking at the surface water-ground water connections and making sure surface water uses are protected.

CHAIR CHANG: That's helpful, some of that factual information.

BARRY USAGAWA: I stand corrected on that.

CHAIR CHANG: For me one of the challenges is the petitioner is not the Commission but rather it's BWS. Given your limitations that you don't manage surface water, understanding why the petition is ground water. But from our perspective it may be much broader and I don't necessarily want to wait until there's another case. I'd rather us set the tone for that. I think in staff's review you're hearing the concerns and it looks like we may have information about the stream, so it may be worthy of further discussion and further exploration.

COMMISSIONER MIIKE: I also would really like the Commission to go back and look at Waiāhole and regulate those streams. I mean it's been very frustrating to me that we've just sort of ignored it when it's clear from the Supreme Court decision that we should be regulating.

COMMISSIONER RODRIGUES: Just a comment, what a fascinating discussion this morning. I love this.

DR. SCHEUER: If I may and this is more reflective of the many conversations that we had across the area. Surface water and the connection between surface water and ground water withdrawals, particularly in the mauka areas, is front of mind for community. They want to know why there's not water in their streams and we try to lay out the fairly complex hydrological and economic history that sort of led to that state of affairs. I just want to reflect even though this has been on a slow path over the board's initial request for the Commission to initiate things and then the board hiring a firm and developing a petition and doing outreach and then the delay and doing things, I can say with some confidence that the community, if there was extensive delay to make this go simultaneously with the surface water petition, that would be very frustrating to a lot of folks in the community who've actually been very welcoming of the board's taking this initiative and desiring of this action to go forward.

CHAIR CHANG: I don't think we're necessarily looking at delaying it any further but wanting it to be comprehensive. There appears to be existing vehicles for us to still look at surface water.

DR. SCHEUER: I just want to uplift those voices in front of you.

CHAIR CHANG: I appreciate that. Those are the ones whose interests are at stake and I think this is a helpful process to elevate those voices.

COMMISSIONER KAGAWA-VIVIANI: Wearing a different hat, I'll just share as a grad student I worked in upper Mākaha on Board of Water Supply projects. Every time I was in the field, every two weeks I crossed the stream to take water samples for stable isotopes and what I saw, I had a rain gage collector and the stream water. What you see, the stable isotopes of water basically tell you about where that water molecule came from. It really pointed to the importance of Ka'ala as the steady source of that water and I would see the streambed dry seasonally. I think I'm appreciative of this petition because I think it can really help us think about how to manage water in the most water limited region of our island. Many people don't know how much water actually is imported to Wai'anae from the Board of Water Supply to support the population and so if the community is behind it, I think it's a really important opportunity to help folks think about water resources and our population demand and the real urgency of planning. I think I lost my thought, but I wanted to share that anecdote because I definitely have witnessed for myself and there are signs there about how dependent this region is on, specifically Ka'ala, for the aquifer and resources. How that's going to change in the future is definitely something I think everybody could better understand and have momentum around, so thank you for petitioning.

COMMISSIONER MIIKE: I'm just not clear, if we postpone the decision we're going to make, what additional information are we going to end up with?

DEPUTY KAHAHANE: The primary reason for postponing is to receive comments back from the counties. Staff will need to independently verify the information in the petition, but to be frank I think there is ample information in the petition on which to proceed.

BARRY USAGAWA: I'd be remiss to not mention the state of our water system, as well. We did talk to land owners and developers in Wai'anae and certainly there is a great interest to build affordable housing, development there. Kind of playing some of the scenarios out around the amount of pumpage that we can get out of Mākaha and Wai'anae if that is curtailed and the sustainable yields may do that. We have the ability to pump water in up to a certain point and there's limitations to that and I'd be happy to go into that later. Because of Red Hill and its shut off and now even though we have an interconnected system, we have other new sources that we're trying to develop. It's taking time but the fact that we can move water in at least into Wai'anae town, it does clarify some of the uncertainty around water availability should the sustainable yield be reduced substantially. There are limitations, I can get into that later but I just wanted to mention.

CHAIR CHANG: I didn't even realize that you were pumping water into Wai'anae. I had no idea.

BARRY USAGAWA: Several community members felt the same way.

DR. SCHEUER: In fact the most common understanding of the community is Wai‘anae is dry because Board of Water Supply is pumping water out. The opposite is true though certainly historical actions of building tunnels and other land use changes is part of what’s driven Wai‘anae to be much drier than it was historically.

CHAIR CHANG: I was just fascinated by the perception versus the reality. It is extremely different and what we always say is once perception becomes reality it’s really hard to change and that is a lot of the viewpoints.

DR. SCHEUER: To Commissioner Kagawa Viviani’s point, there was a plan, there was a goal by tunnel drillers to drain the wetland at the top of Ka‘ala by drilling far enough under the mountain. They failed from an engineering perspective, thankfully.

PUBLIC TESTIMONY – None

20250218 00:51:06

MOTION: (KAGAWA-VIVIANI / MIKE)

To approve staff recommendation with an amendment:

- That the Commission extend the 60-day deadline for the Chairperson to make a recommendation (step 4 above) ~~to the March 2025 meeting~~ **for a period not to exceed an additional sixty (60) days**, to accommodate and gather comments from the Mayor, City Council, and BWS as set out in HRS § 174C-41(b).

UNANIMOUSLY APPROVED

(MIKE/KATAYAMA/CHANG/KAGAWA-VIVIANI/HO/RODRIGUES)

20250218 00:52:50

C. NON-ACTION ITEM / INFORMATIONAL BRIEFING

1. Briefing by Commission Staff and the DLNR Division of Forestry and Wildlife on Watershed Management in Hawai‘i: How Forest Protection Supports the Mission of CWRM

PRESENTATION GIVEN BY: Katie Roth – Planning Branch Chief, Scott Fretz – Division of Forestry and Wildlife, Maui Nui Branch Manager

QUESTIONS / COMMENTS

COMMISSIONER MIKE: A long time ago, I remember some studies on Lāna‘i where they were trying to measure the capture of rainwater above the pine forest. Do you have any such things about how much water a forest can retain quantitatively?

SCOTT FRETZ: Not off the top of my head. There's a lot of literature on that in different kinds of forests, different types of vegetation, transpiration rates. I don't have anything off the top of my head. I could look that up and give you guys a set of references.

COMMISSIONER MIIKE: Okay, thank you.

COMMISSIONER KAGAWA-VIVIANI: On Commission staff I think we have somebody who spent extensive time on this, Ayrton Strauch, and I also look at transpiration. As a rule of thumb, thinking about forests, and this has been understudied, the infiltration capacity of a forest soil, the ability of water to move vertically, unless rainfall intensity really increases, will always be able to absorb that water, so when it rains it shouldn't move off, but when we change the nature of the vegetation- it's compacted- it increases runoff, so that's really well established. I had a question off of that for Katie. We know that science but are you running scenarios on if you adjust recharge area, that 30 x 30, you adjust its boundaries or where it's at or if you just suddenly lost your field crew, how does that then affect the relative annual yield compared to sustainable yield. Have you done any kind of analysis for that area? Just really conceptually have you guys been playing with that at all?

KATIE ROTH: Short answer, no, but I think you're referring to the slide where I showed the map where DOFAW has tried to estimate the amount of water in million gallons per day that's protected by these fenced areas. They've been able to take a georeferenced polygon and apply it to the water budget model which again, the inputs to that model are limited based on specific native and non-native species and vegetation. That's the extent that I'm aware of to date that DOFAW has done to try to articulate and understand the value of forests as it relates to amount of water protected by these fences. How that then may relate and dovetail back to sustainable yield, we have not bridged that conversation.

COMMISSIONER KAGAWA-VIVIANI: It might be a useful mapping exercise to kind of run.

KATIE ROTH: Absolutely.

COMMISSIONER KAGAWA-VIVIANI: I had another comment, on one of your slides you showed the of Betsy Gagne source three spears, but one thing I noticed is missing is you might have recharge from the forested area and have some assessment of sustainable yield which is going to be less than that and then you had the tap, but what would be useful on that diagram is that sustainable yield should also support cultural and ecosystem flows. There are two places where we think about ecosystems and water- one, is on the supply side and the other is the aquatic ecosystems, both which fall under DLNR. I'd be happy to continue to think about how to conceptualize how as the Commission we are managing that budget. Not to put in money terms but that's how people also think, to really make sure we're accounting for all of the variables in and all of our expenses. I think the mauka to makai framework is really from an ecologist's view. I come from environmental sciences, we're thinking about the landscape but we're not really thinking about it in the management landscape as well. Having for Planning

Branch a better handle on when we say ecosystem here, we're talking about recharge and what's coming in and then ecosystem on the nearshore coastal areas. I know we haven't really done great in thinking about how what we do affects sediment and maybe that's overreach, but that's where really important conversations could be with Clean Water Branch for coordination purposes.

CHAIR CHANG: Scott, Olowalu, that's part of the large NOAA grant so there is an opportunity to quantify some of the kinds of questions that Aurora is asking. Are we taking baseline before we start that Olowalu project so that we have some ability to quantify what impacts all of that mauka to makai effort under that NOAA grant from all the way down to marine impacts to marine ecosystems? Is that part of that NOAA grant that you guys are doing, that baseline study?

SCOTT FRETZ: Sure, some is. There are easier things to monitor and then there are harder things to monitor. Some of these things take a long time also because rainfall is so variable and climate change. Sometimes to measure the amount of water, that can be challenging for that reason, but certainly water quality it can be measured in the stream and in the ocean where the sediment is entering turbidity. That is already in progress, so the baseline is there, you asked about the baseline. That's an easier one. Each one of those objectives that I mention that we're doing has a monitoring component and that can be short-term and long-term monitoring both. There's the performance part the survival of the plants that are planted and that sort of thing, so yes and no some things are easy can be measured in the short term. Others take a much longer span of time to measure.

CHAIR CHANG: Fair enough but as long as it's part of the considerations, at least you are looking at some of those factors in developing management strategies. In my view that is one of the real values of DLNR, is we have the ability to coordinate all of those expertise within DLNR. I'm going to make a little plug here as we move on to legislation, but this is why CWRM needs to be part of DLNR to be part of the conversations on asking some of these really important questions because water is integrated in everything. I think having everybody at the table is a valuable tool when we develop strategic management goals and implementation strategies, so thank you.

COMMISSIONER KAGAWA-VIVIANI: Thanks Scott, I was wondering, we have the estimates on how much it takes to pay for and manage fences. What is the cost estimate for firebreaks? Just ballpark because they seem in this day and age to be a really important investment, green breaks or firebreaks.

SCOTT FRETZ: It depends on what kind of firebreak it is and I'll give you a sense of that because they can go from fairly inexpensive to do to very expensive to do. Across the span, some of the simpler ones to do are firebreaks that just involve fuels management, vegetation management of fuels and that means that crews go into that area either with herbicides or weed whackers or even a dozer to initially get the break in place. It's an area where you keep the vegetation to three inches or less. That requires people, we just got positions, they're not recruited yet because they got into a little bit of a legislative limbo. Positions got approved by the Legislature giving us a crew to do this full-time, so

the cost of that crew is however much it costs for four fte (full time employees) plus a heavy equipment operator and that is, you asked about the cost, that is the cost to maintain 20 to 30 miles of firebreaks in an area like this, which is a lot. In fact they can probably do a lot more than that, but that's our initial target for them. So that's a simple firebreak. Now something like restoring a wetland or restoring a riparian quarter costs much more. It requires a much more significant investment, you need a water source. It requires an investment in the plants that you have to buy and plant those in the ground, so it's a higher cost. Wetland restoration is even higher because you're dealing with excavation and removal of soils in order to get that back to its hydrological function. Green brakes can be done but they require water and so green breaks with grazing can be fairly cost effective and not cost too much to do if the water source is there. Dip tanks are a really important part of all that and they cost \$60,000 each. I showed you a plan to put in four dip tanks. In our full buildout Maui Nui plan for dip tanks is to have 21 dip tanks. 21 x 60,000 is the cost of those. We probably got funds for six of them right now.

COMMISSIONER KAGAWA-VIVIANI: But that doesn't necessarily account for helicopter time when you actually have to use them, correct? That's just having that standing infrastructure. Thinking about good return on investment is really investing in preventing the fires and their movement and risk. That's something that DOFAW has historically done really well and then our urban firefighting is used to putting out fires. How DOFAW ties to CWRM is how do we help manage the prevention side? I'm not sure I'm making sense.

CHAIR CHANG: Go to the Leg(islature) and get the 22 positions we're asking for.

SCOTT FRETZ: There's another follow-up because you mentioned that cost effectiveness part of it. Using this Olowalu to Ukumehame project as an example and I think a good model, we're bringing different funds into this from different sources. There was a NOAA grant for \$10 million that was really helpful in getting a lot of this going, the State currently has contributed about \$2 million to this, there's additional money in the Leg(islature), in the Governor's budget this year for just under \$5 million to contribute to this. Speaking of cost effectiveness, we just wrote two FEMA grants for \$11 million for this area and they require that you do exactly that. They were written for fire prevention, they require a whole section where you use formulas and you determine that it is cost effective to use this investment of the \$11 million to prevent the damage that fires would cause and they're all set up. We did that we went through that process and they were highly cost effective ratios. I think the ratio for one, we did it separately for Pōhākea and Ukumehame, and the ratio for one was over 15 and the other was very high, as well. That was a quantitative way that we went through that cost effectiveness planning scenario.

KATIE ROTH: One thing I might also mention, Scott and I have been involved in developing a watershed cost-share for the East Maui water lease process. Scott has had to do an analysis to understand how much it costs to protect those East Maui forests within the proposed license area and I think it was a little over \$4 million annually, right?

SCOTT FRETZ: Yeah, it was \$3 - \$4 million if you include the cost of the fencing and all of the helicopter work it takes to do the fencing. Fencing is capital improvement, it's one of the most expensive parts of it. We're currently spending about \$2 million a year to manage the East Maui Watershed, that is the watershed that serves the ditches that capture water for the EMI (East Maui Irrigation) uses. \$2 million a year is currently being used for that, but when we brought in the fences, because the fences all have to be replaced, and then prorated it, it comes to \$3 - \$4 million a year. We created a cost-share so that when the Land Board issues a lease or encumbrance of some kind to an entity to use that water, the formula allows you to calculate the share that that entity has to pay to the management of that watershed.

KATIE ROTH: That formula is being applied to the current revocable permit for A&B (Alexander and Baldwin) that they've been getting renewed annually in anticipation of getting a lease. The formula has also been applied in the context of CWRM with Ota Well, although we're in discussions about what that may end up looking like. But that's something that we are trying to think more internally about- how you can estimate the cost of protecting these forested areas, understanding that nexus to the water that we're then allocating through a permit. Are there ways to require permittees to contribute a portion of the overall funding needed to protect the forest that then supplies the water.

PUBLIC TESTIMONY - None

20250218 01:45:15 - Break

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C. NON-ACTION ITEM / INFORMATIONAL BRIEFING

2. Briefing by Commission Staff on the Status of the Hawai'i Water Plan Framework Update

PRESENTATION GIVEN BY: Katie Roth – Planning Branch Chief

QUESTIONS / COMMENTS

COMMISSIONER KAGAWA-VIVIANI: I like that you have a checklist, I was thinking about the value of not just a checklist but that kind of rubric. Not only have you done it, is it good. Just from my experience trying to grade. I didn't know we had a water reuse plan, so I should look that up. I appreciate just raising the visibility of what already exists because sometimes we just don't even know it's there. How much conversation is there planned with Department of Health? I think when the Commission was conceived it was a world in which we weren't thinking about contaminants. There's this phrase with water, there's too much, too little or too dirty and I don't think we contemplate that last aspect

very well except we are connected to DOH, but it's not reflected sometimes in our documents. Any thoughts on how to make that better?

COMMISSIONER HO: I think we regularly have conversations with staff from CWRM, I understand. We have those conversations. I think our Water Quality Plan was last updated in 2019 so lots has happened since then, a lot of new vision has occurred since then. We're going to have to try to redo it. I don't know how long it's going to take, but in water quality there's reuse, there's all kinds of things that have to go into that. We're developing it, we actually hired someone who we believe is going to be able to help shepherd this which I'll introduce you to him. I turn it back over.

KATIE ROTH: That's great to hear that you actually have a dedicated staff person to help with the next plan update. I would just say that in my two and a half years in this position, I haven't had a meeting with DOH specifically about the Water Quality Plan but we do have regular interactions with them on a variety of other water quality related issues. There could be room for improvement on specific conversations about the plan itself and what the next update needs to look like and include. I'll also mention that I forget if it was in the audit report or in the review commission report from '94, '96 but one suggestion that has been contemplated is whether or not the Water Resource Protection Plan and the Water Quality Plan need to be combined into one. That's again something we're thinking through but that's a possibility. We would be talking to DOH about that before making a decision.

COMMISSIONER KAGAWA-VIVIANI: Interesting, there's one overarching document with different sections.

COMMISSIONER MIIKE: It's a comprehensive and ambitious plan. Number one is about what's your overall timeframe for accomplishing this? Second is have you actually started on any of these components and then third, as you progress what do you expect to fall by the wayside which would be because you have such a wide range of things. I don't think you can possibly accomplish all of them within any kind of viable timeframe, so it'd be interesting to see as you progress how often you're going to update us on how your focus changed.

KATIE ROTH: We can commit to doing more regular updates on this process leading up to October 2025. I did have a slide regarding the timeframe, it wasn't up there that long, but we have started a lot of this work already. The changes and possible amendments to the different plan requirements is the big heavy lift that we're tackling right now and we see that as requiring the most outreach and engagement from us with the plan preparing agencies and other stakeholders before we're ready to bring anything to you for final input. I think before we come to you for formal adoption we would definitely be giving you a draft of the document preceding that adoption meeting. I want to better understand when you say, started on any of the components, are you specifically looking at the framework document itself or are you talking about the plans themselves, the updates that plan preparers would do?

COMMISSIONER MIIKE: You have listed a whole bunch of things that you are doing or plan on doing and it seems like a really ambitious approach. You probably can't answer that now, but you're obviously going to have to develop priorities upon those areas about which you hope to accomplish within a reasonable timeframe. I just would like updates on that. I don't need regular updates but just let us know as your thinking and your practical approach shifts, how that might significantly affect what your initial approach was.

KATIE ROTH: Okay, can do.

COMMISSIONER KATAYAMA: On your plan integration and timely updates slide, is your thoughts that you update the Water Use Water Protection Plan every five years? Is that sort of the framework?

KATIE ROTH: The current guidance is that all of these plan components should be updated every five years. We could have a discussion about if that needs to be extended, but I think this idea about allowing partial plan updates may be one way to navigate the complexities surrounding a full-blown plan update. We would be thinking about still instituting that five year update requirement.

COMMISSIONER KATAYAMA: Part of that slide you had a bubble chart, that Ven diagram of all the different elements. If you were to put a planning cycle on each of those bubbles, would it fit into a five year framework?

KATIE ROTH: That update cycle currently exists within the 2000 Framework and what it says in that document is that each five year update cycle shall commence on the third year with adoption of a revised plan by the fifth year. There's not a lot of detail there, but it's basically saying that you would start your update process in year three.

COMMISSIONER KATAYAMA: But in reality plans are older than some of my kids. I understand where we are to get to where we need to be. I think informative at least from a conceptual point of view is what cycle we need to get all of these planned so it gets into your framework where you have the relevant data because the comments you made about plans using only data that's been adopted, literally they are adopted because they're so old. I think as a starting point as you're working through your update, it'll be good to put in a linear analysis of does all of this fit into what window.

KATIE ROTH: That's a good point. The guidance I've been giving preparing agencies who have just started their initial update process is to hold off until this framework update is complete. If they're not at the stage of the Ag Water Use and Development Plan which again, we're still contemplating bringing that before you for adoption, if it's not at that kind of final end stage, the instructions we're giving is if you can take a pause for the next six months until this new framework has been adopted and proceed from there. But in an ideal world we would get the State level plans adopted as needed first and then the county Water Use and Development Plans would get updated after.

CHAIR CHANG: I put nothing past Katie. She has taken on many of these and she's actually presented them, so as ambitious as the schedule is, I am optimistic we will have something by October, September. I have three points, one is funding. We can say year three but without funding it is unlikely we're going to be able to, which has been the reason for why a lot of these plans have not been regularly updated. I would like CWRM and Ciara, we've talked about this before, is establish a dedicated source of funding. Whether we may end up having to do that by rules, I think we do have to look at some dedicated source of funding that we don't have to rely upon legislative appropriation to do some of these so that it's embedded, so that we can have what Wayne is talking about, the cycle and we can keep up to that. One, looking at some dedicated source of funding and it's not only for these plans but it's a lot of things that CWRM needs to do. Also looking at regular meetings and when you talk about having an ownership, not only CWRM staff but it's also all of our partners. I like that Ciara has initiated regular meetings with the water departments. I would encourage you to have regular meetings with all of the different agencies that contribute to the water plan, being regularly at the table so that they're part of the discussion why these things are important. They need to have an ownership to this so that they're part of the discussion early on and we can also consider their comments early on in this process. One, having regular whether they're quarterly meetings, however you want to have them but there should be regular meetings with our key stakeholders or also developing plans that contribute to the water plan. Finally, a way to keep the Commissioners updated without having to do meetings, without having to do formal presentations and I don't know if that's a legal question, can you send us monthly updates or however updates may be based upon your flowchart on next steps tied to your milestones. If the Water Commissioners can get updates and then we can pass on comments to you without violating the Sunshine Law, we're not communicating to each other but at least to staff. I think that would be very helpful for us so that we're not just having to wait for this, but you can get regular updates from all of us and so that we are also being part of the process so that when it does come for approval, that approval process can also be facilitated to ensure that the concerns or comments we've had have been incorporated into the plan itself.

COMMISSIONER KAGAWA-VIVIANI: In the existing framework there's water resources protection which is largely on water quantities, but it does address public trust. It's sort of buried in there and then there's water quality and those sort of lean into State water projects and Ag water use. Is there a way to make public trust purposes like cultural and ecosystem status and flows...we just had this presentation from DOFAW thinking about the ecosystem. Where's our landscape in there because what we have represented in the projects is demands, but how are we holding public trust stakeholders in there? I don't know if it's a stand-alone document, but it should be easy to find. I guess a question and maybe a priority for me personally is understanding where that lives in the plan framework. I think if it's addressed on the front-end by planners then it doesn't come back to us as hard in testimony and conflict and contested cases. I know that's probably large part of the driving force between what was proposed but then how is it implemented in a way that makes sense to both? I'll just say that community that is not organized into a utility, that doesn't have a place in the process, they're not going to be at a quarterly meeting or get a quarterly update. How is that engagement part considered? I think that's

the biggest challenge honestly in all of this, but also is that again in a standalone document with that group of four that feed in the county level? I think that would be helpful. I think getting that right would be a real service to all of the work of the Commission. I don't know if others have thoughts on this or if you have preliminary ideas that you're willing to share.

KATIE ROTH: I would say that's something we are definitely talking about and trying to figure out where it would live, how it would be articulated not only in the framework itself but that information then conveyed and embedded within the plans themselves. I don't have an answer as of yet, but we can definitely engage more one-on-one with you to think through what that could look like.

COMMISSIONER KAGAWA-VIVIANI: I think what would be useful is, okay here's potential idea one, potential idea two, potential idea three and then that would be easier to move the conversation forward. Thank you. That's my main last comment.

PUBLIC TESTIMONY - None

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C. NON-ACTION ITEM / INFORMATIONAL BRIEFING

3. Briefing by Commission Staff on Tracked State Legislation Related to the Commission on Water Resource Management for the 2025 Legislative Session

- **HB1142 – RELATING TO STATE WATER CODE PENALTIES**
Adds a minimum penalty and amends the maximum penalty per violation of the State Water Code, expands the types of potential violations, and makes each day that a violation exists a separate offense. Requires CWRM to consider certain factors when imposing penalties.
- **HB1495 HD1 – RELATING TO THE KEAUCOU AQUIFER SYSTEM**
Establishes and appropriates funds for the Keauhou Aquifer System Monitoring Pilot Project within DLNR. Funds the installation of two monitoring wells in the Keauhou Aquifer System. Requires reports to the Legislature.
- **HB306 HD1 – RELATING TO STATE WATER CODE PENALTIES**
Adds a minimum and maximum penalty per violation of the State Water Code and makes each day a violation continues a separate offense. Establishes factors for CWRM to consider in penalties. Increases maximum fines incrementally from 2030 to 2045.
- **HB315 – RELATING TO STATE WATER CODE PENALTIES**
Adds a minimum penalty of \$50 per violation of the State Water Code and makes each day a violation continues a separate offense. Requires CWRM to determine penalty amounts based on circumstances.
- **HB405 – RELATING TO WATER**

Defines the public trust responsibilities of CWRM. Allows CWRM to retain independent legal counsel. Expands CWRM's scope to include emergency declarations. Repeals the Deputy to the Chairperson position and establishes an Executive Director. Amends Commission composition. Authorizes challenges to emergency orders. Establishes fines for certain water use offenses.

- **HB509 – RELATING TO STATE WATER CODE PENALTIES**
Adds a minimum penalty and amends the maximum penalty per violation of the State Water Code. Expands the types of violations and makes each day a violation continues a separate offense. Requires CWRM to consider specific factors when imposing penalties.
- **HB510 HD1 – RELATING TO DECLARATION OF WATER SHORTAGE AND EMERGENCY**
Amends the conditions, manner, and areas in which CWRM can declare and provide notice of water shortages and emergencies.
- **HB915 HD1 – RELATING TO WATER USE**
Authorizes the Board of Agriculture to investigate and survey non-potable water availability. Allows CWRM to require dual line water supply systems in new residential and mixed-use developments in designated water management areas. Requires rule and ordinance updates to allow such systems.
- **HB919 – RELATING TO THE COMMISSION ON WATER RESOURCE MANAGEMENT**
Adds the Chairperson of the Hawaiian Homes Commission or their designee to CWRM. Clarifies that only the five non-ex-officio members appointed by the Governor must have substantial experience in water resource management.
- **SB1210 – RELATING TO WATER USE**
Authorizes CWRM to require dual line water supply systems in new residential and mixed-use developments in designated water management areas. Allows these developments to be included in irrigation projects. Requires rule and ordinance updates for such systems.
- **SB1239 – RELATING TO WATER CONSERVATION**
Prohibits the use of potable water to irrigate golf courses, with certain exceptions. Defines potable water.
- **SB145 – RELATING TO DECLARATION OF WATER SHORTAGE AND EMERGENCY**
Amends the conditions, manner, and areas in which CWRM can declare and provide notice of water shortages and emergencies.
- **SB1461 – RELATING TO STATE WATER CODE PENALTIES**
Adds a minimum penalty and amends the maximum penalty per violation of the State Water Code. Expands the types of violations and makes each day a violation continues a separate offense. Requires CWRM to consider specific factors when imposing penalties.
- **SB150 – RELATING TO RED HILL**
Establishes a WAI Policy Coordinator for Red Hill initiatives. Creates the Red Hill Remediation Special Fund.
- **SB1602 – RELATING TO THE KEAUHOU AQUIFER SYSTEM**

Appropriates funds for the installation of two monitoring wells in the Keauhou Aquifer System. Establishes the Keauhou Aquifer System Monitoring Program. Requires reports to the Legislature.

- **SB204 – RELATING TO STATE WATER CODE PENALTIES**
Adds a minimum penalty and amends the maximum penalty per violation of the State Water Code. Expands the types of violations and makes each day a violation continues a separate offense. Makes setting and collecting fines by CWRM mandatory rather than discretionary.
- **SB205 – RELATING TO THE COMMISSION ON WATER RESOURCE MANAGEMENT**
Adds the Chairperson of the Hawaiian Homes Commission or their designee to CWRM.
- **SB209 – RELATING TO WATER**
Prohibits the use of 1,000,000 or more gallons of water per year for recreational or ornamental purposes.
- **SB272 – RELATING TO WATER**
Defines the public trust responsibilities of CWRM. Allows CWRM to retain independent legal counsel. Expands CWRM’s scope to include emergency declarations. Repeals the Deputy to the Chairperson position and establishes an Executive Director. Amends Commission composition. Authorizes challenges to emergency orders. Establishes fines for certain water use offenses.
- **SB3 SD1 – RELATING TO WATER**
Establishes a public trust purpose for CWRM. Allows CWRM to retain independent legal counsel. Repeals the First Deputy to the Chairperson position and establishes an Executive Director. Attaches CWRM to DLNR. Adjusts Commission membership and notification requirements for water shortages. Establishes fines.
- **SB386 – RELATING TO WATER SYSTEMS**
Requires DLNR to acquire all West Maui water systems by eminent domain and hold them in trust for Maui County to manage.
- **SB438 – RELATING TO WASTE DISPOSAL FACILITIES**
Prohibits the construction, modification, or expansion of hazardous waste or solid waste disposal facilities near or above significant aquifers. Prohibits such facilities on Class A and B agricultural land.
- **SB543 – RELATING TO WATER**
Establishes a WAI Policy Coordinator and other positions within CWRM for Red Hill initiatives. Creates the Red Hill Remediation Special Fund. Allows CWRM to retain independent legal counsel. Repeals the Deputy to the Chairperson position and establishes an Executive Director. Amends Commission composition. Adjusts CWRM’s authority regarding water emergencies and shortages. Establishes fines.
- **SB848 SD1 – RELATING TO DESALINATION**
Establishes a Desalination Planning Task Force to assess feasibility and develop a timeline for desalination as a potable water source.
- **SB867 – RELATING TO AFFORDABLE HOUSING**

Establishes a working group within the Governor's Office to assess water resources and streamline well permit approval for affordable housing. Requires an inventory of water resources and sources of aquifer replenishment.

PRESENTATION GIVEN BY: Deputy Ciara Kahahane

QUESTIONS / COMMENTS

HB510 HD1

COMMISSIONER KAGAWA-VIVIANI: I think everywhere it's known that the farmers get the first hit because they're not in immediate use. But that has some long-term implications for the viability of farming and usually it's a trend everywhere where farmers can no longer keep farming. I'd be interested in getting that better or right. I'm looking at Wayne here. It's everywhere so what does happen when we're trying to think about food systems. Thanks for the update.

HB915 HD1

COMMISSIONER MIIKE: A question on that, this is an absolute requirement in the proposed bill?

DEPUTY KAHAHANE: It's in the Commission's discretion whether to.

COMMISSIONER MIIKE: If that's the case then whether or not this bill passes I think we still have the requirement because applicants have to show a reasonable alternative. We can always say, okay tell us why it's not reasonable to have a dual water system, so I think we already have that.

SB3 SD1

COMMISSIONER MIIKE: What's the Department's position on this?

DEPUTY KAHAHANE: We submitted comments. There's a lot to unpack in this bill, there's a lot going on here. I think the recognition that the system could be improved, clearly the system could be improved. The gist of our comments is essentially that we recommend a more holistic look at it to really assess what is working as far as the relationship between DLNR and CWRM, what is not working and how can we address that. It has been 30 years since the 1994 Review Commission initially recommended creating more separation between CWRM and DLNR and we've had the benefit of 30 years of water law. When that Review Commission report came out, it was before the Waiāhole case had even been decided. Our comments recommend a more holistic look and perhaps we need to take the initiative in assessing what could be changed or improved with the way the Commission works right now.

COMMISSIONER MIIKE: Or clarify. There's a lot of stuff in here so I don't expect it's going to go forward, but if it gets narrowed down and the Department has a position, I would request that included in that is if one or more members of the Commission don't

agree with the Department's position, they at least include in their comments the opinions of Commissioners rather than enough having to go there and testify against the Department's position.

CHAIR CHANG: That's fair.

COMMISSIONER MIIKE: Right now I'm not too worried about this bill. It's got so much stuff in it, I can't imagine it moving forward.

DEPUTY KAHAHANE: We will continue to update you as it moves forward and if there's at any time you want to chime in, you can just email me. I appreciate your attention to this one in particular. Whether this passes or not, I've been talking to the branch chiefs about this. I think it is time for us to step back and look at what in the best case would our organization look like, what would it take, what kind of staffing or space or changes to the Water Code would we need to truly fulfill our public trust obligations as contemplated by the Constitution.

COMMISSIONER MIIKE: Why are they asking to establish a public trust purpose? It seems to me it's pretty clear already what public trust purposes are.

DEPUTY KAHAHANE: The bill enumerates the four public trust purposes and specifies that they should be considered before and separately from other water use permit applications.

COMMISSIONER MIIKE: That's going further because how would that be changed if the Supreme Court has ruled on what that exactly means? Can the Legislature change that? Because it's a constitutional question because the Supreme Court clearly states there are no absolute priorities. We give a lot of leeway to public trust purposes, but they say you can't exclusively save it only for that.

DEPUTY KAHAHANE: Right, that's a very good point and ultimately as you know the Supreme Court defines or is responsible for interpreting the agency's constitutional obligations and those are independent of the Water Code, they're higher than statute. I do have a question or at least an interest, a curiosity. Perhaps if this was to pass, would that process that is established under the statute be valid given those pronouncements that we've received?

COMMISSIONER MIIKE: One of my continuing concerns is the Supreme Court rules but if the Commission just ignores the ruling, there is no way for the Supreme Court to come back and say, hey you didn't listen to us, unless that decision goes back to them in court. We have some things like that hanging over our heads which nobody seems to be paying attention to.

DEPUTY KAHAHANE: One of my thoughts on having a separate process for public trust water use permit applications is we have this tension between wanting to address the public trust uses and wanting to do it efficiently. The other side of that is wanting to

address the issue holistically. If it were to be a separate process and that these permits were acted on before all of the others, how would that impact our ability to analyze the tradeoffs between other non-public trust purposes that are being requested and those public trust uses.

COMMISSIONER MIIKE: Well we can always ask the Governor to veto it.

COMMISSIONER KAGAWA-VIVIANI: Thinking about addressing issues when they come before us as permits and the way to efficiently and effectively and holistically do it is through what we were discussing is the planning. That's a slow process but permits are. There's that bigger picture of what is our stewardship responsibility, and people as part of it. I think this bill raises a lot of important questions and I think whether or not it passes, I'm glad that it's stoking discussion on what is the job of the Commission and what is a structure that's going to enable us to do that the best. As staff does contemplate that, if there's a way to have a full decision amongst the broader, inclusive of Commissioners and others in public testimony, I think that would be really valuable. Because in the past it seems like staff have often run a lot on their own, but they're not the ones facing angry people. I don't know all the history of what the staff experience, but they have a lot of institutional knowledge. But also I'll just say in the sciences, a lot of us are trained in engineering or geology and so we don't have an understanding of how the social setting or legal setting works and meshes up against that. Maybe planning is the vehicle but I don't know if that accounts for the streams and the ecosystems. How do we have that broader conversation is really an important priority, especially in times of likely budget cuts coming up. Thanks to SB3 SD1 for raising these.

SB867 SD1

COMMISSIONER MIIKE: I'd be interested to see how are you going to parse out the focus on affordable housing and these things. I don't see how you do that, but if you got a working group, I'd be interested to see how they do that.

COMMISSIONER KAGAWA-VIVIANI: I think you heard some earlier concerns, how much time do you anticipate this taking on staff time? Because what they're proposing to do is already within the Commission's role, so is it duplicative? Is it a net benefit from the Planning Branch's standpoint? How much because they're going to have to gather that information, I assume, for the working group and assuming it passes, sounds like there is strong political pressure, that's just more work on staff.

DEPUTY KAHAHANE: It is work though that we would want to do anyway. That's really the thing here is that we see a need to have more coordination with the counties regardless and so whether that happens through this working group or whether it happens separately if this bill doesn't pass, we are going to need to have more conversations with them and to figure out what all of us could be doing better to ensure that projects aren't held up. It's not necessarily affordable housing projects only but all projects within the State to make sure that there's a clear division of responsibility and that we're all working proactively to make sure that there's going to be water available for any projects that are approved by the county.

COMMISSIONER KAGAWA-VIVIANI: I have some concerns because the bill as stated has to me, factual errors where it states the Hawaii Water Plan consists of four parts with different entities responsible for preparing each part including a Water Resource Protection Plan, a Water Use and Development Plan prepared by county. Structurally, how it was outlined there's a failure to recognize the Ag Water Use and Development Plan. It makes me wonder just how well informed the writers of this legislation were about the work of the Commission. This would be, without correction, put into the law. The composition of the working group emphasizing county, it really foregrounds county having the authority. They're saying the county should be deciding allocation, but they're going to have to rely on physical realities of the landscape. That the Chief Housing Officer shall serve as the chairperson of the working group, we have Housing Senate and House Representatives on standing committees, Executive Director of HHFDC, Chairperson of the Commission on Water Resource Management and their designee, the Director of Health and their designee, Chief Engineer of DLNR, Engineering Division Directors of each county Planning Department designees, Directors of each county Housing Department or their designees, Chief Engineers of each county board of water supply. There's a couple people who understand water and they state that climate change is considered in county level plans, but I'm going to say from my experience they've considered sea level rise but not water availability. I'm concerned because it seems like a run around the Commission and yet I guess it would be good to understand how this is not and how it's actually considering the physical realities because the Commission's role is to think about public trust. The counties don't do that, the county utilities, their job is to support municipal water use and they do a good job at that but it's not their job to think about the ecosystems or other stakeholders. It makes me leery and concerned and also aware that maybe our legislators don't understand what the Commission does and why it's important to have education.

DEPUTY KAHAHANE: Your point is well taken. At the end of the day the counties as a political subdivision of the State of Hawaii also bear its public trust obligations. Whether they always act as such is a separate question, but if they were to take on additional authority, if they were to be given additional statutory authority, it always comes with the constitutional obligation to fulfill our public trust doctrine. I'm not sure if that has been thought about or really contemplated in forging this working group concept, but when I read through the bill I was keeping in mind the fact that no matter who is taking the lead that public trust obligation resides with everyone that acts on behalf of the State, including the counties themselves.

COMMISSIONER KAGAWA-VIVIANI: Sure but I haven't seen it happen unless the Commission has pushed them and usually the Commission is pushing them because there are other practitioners or other stakeholders who are reminding us that we aren't doing our job. I think the Governor has not hidden that affordable housing is a major part of his agenda and that the purpose of this act is to establish a working group to ascertain the State's available water resources and water system source capacity. We've got that, a Commission streamline permit approval process to ensure water supply to further plan for the development of affordable housing, I think we can agree that there are permit

approval processes, but I'm not sure that the hang ups are always at the Commission. If it's a water meter issue, that's at county level. If this effort is to identify and road map that, if I hear that the Kailapa community is pissed off at the Commission for holding things up when I think it's actually in another jurisdictional space, if mapping that out is part of this, then that's great. But given what I perceive is lack of awareness of the work of the Commission and how water physically works and lack of climate change projections for a given area, I think there's a lot of learning that has to happen before people jump into "let's streamline this process." Because the last thing you want is you build out the system, you have approved this, and then the utilities are scrambling to figure out source, which is what happens on O'ahu and then are in this bind. Desalination is expensive, water reuse is expensive. When we have PFAS in our wells, treatment is expensive because we do not just have one surface water treatment plant, we have ten wells that we are sourcing and switching. The cost of that goes back on the utilities and rate payers. I think there is a real need to identify before we permit that people understand the implications of that. Where that cost is borne is people's kids and grandkids, that's why I'm pretty passionate about it and soapboxing, but if mapping out who does what and the implication of different scenarios is part of this then that's great. Given the weight of the composition of the working group, I would just be concerned.

COMMISSIONER MIIKE: I have a practical problem with this is that it says it's in the Governor's office. If the governor's office says, hey Water Commission you guys are running the working group, I don't think there's any capacity within his office to run this.

CHAIR CHANG: There is a dedicated group that's looking at affordable housing in the Governor's office. My guidance has been, let's look at something constructive. I look at the Keauhou pilot project as being a constructive response to many of the community's concerns or private sector concerns about conditions that CWRM has put on particular permits and that this working group may be a response to that. How do we streamline that? If we can come up with something constructive like the Keauhou Aquifer pilot project as a constructive vehicle to address both balancing housing needs as well as addressing the community's concerns, ecosystem concerns through this pilot project, that may be a much more constructive use of our time and resources rather than having a working group. There are other attempts to address, in particular State Historic Preservation Division (SHPD) as that's where they see the two major hangups on affordable housing- CWRM and State Historic Preservation Division- and there is a difference between reality and perception. That is the perception, the reality is that it's not necessarily true. SHPD on Lahaina they have been moving their permit approvals in less than a week. Similarly CWRM has likewise been facilitating approvals for projects on Lahaina, but there's a perception that these two divisions in particular are holding up these housing approvals. Unfortunately, I don't think the intention of the working groups is to find out what everybody is doing, as Aurora, you're suggesting.

COMMISSIONER KAGAWA-VIVIANI: It actually says Section 2, to ascertain and address State watershed management. I'm just reading the text.

CHAIR CHANG: I understand what they're saying. I don't know what's at the end of session, whether this will pass, but again I don't think the working group is necessarily the best use of our time or resources. I'd rather us utilize our resources into something more constructive and demonstrate that there is an alternative way at balancing affordable housing, water, cultural practices and that this pilot program may be one mechanism to helping us do that. For me that is the push I'd like us to see going in that direction.

PUBLIC TESTIMONY - None

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C. NON-ACTION ITEM / INFORMATIONAL BRIEFING

4. Briefing by Commission Staff on CWRM FY 2025-2027 Budget Requests included within Governor Green's Budget Package

PRESENTATION GIVEN BY: Deputy Ciara Kahahane

QUESTIONS / COMMENTS

Funding for United States Geological Survey Joint Funding Agreements

COMMISSIONER KATAYAMA: 80:20 is the cost share?

DEPUTY KAHAHANE: Yes, that's correct.

COMMISSIONER KATAYAMA: We're paying 80% of that?

DEPUTY KAHAHANE: That's right.

COMMISSIONER KATAYAMA: In a default situation can we cover the USGS portion?

DEPUTY KAHAHANE: Would we be able to cover the 20%? I'm not sure.

COMMISSIONER KATAYAMA: Not for the whole programing, this \$400,000 just reflects the incremental cost, right?

DEPUTY KAHAHANE: Right, our current cost is actually about a million.

COMMISSIONER KATAYAMA: So \$200,000 is their portion?

DEPUTY KAHAHANE: Right, if the USGS portion was to vanish overnight, we would only be able to cover it by not doing other things that we have planned within our program.

COMMISSIONER HO: By way of a grant?

DEPUTY KAHAHANE: It's a joint funding agreement so it's basically a cost share provision.

COMMISSIONER HO: Are you hearing that you might be in jeopardy of losing some of that funding?

DEPUTY KAHAHANE: I haven't heard anything yet about USGS specifically. It's been on my mind certainly, but I haven't heard anything concrete about cuts to the USGS program.

COMMISSIONER KAGAWA-VIVIANI: My understanding is there are different parts of USGS and some of them are more vulnerable than others. I think water is probably less for now.

COMMISSIONER KATAYAMA: I guess it's just uncertainty, what is our fallback position in the event that it's lost and I don't think anybody knows anything right now but it's really plan b.

CHAIR CHANG: Notwithstanding the federal funds, again this goes to my other comment when Katie was doing her presentation, we need to find a dedicated source of funding, generate revenue from within so we can do better monitoring and we can cover these kinds of expenses. More so now, right.

Funding for Sustainable Yield Hydrologic Investigations

COMMISSIONER KAGAWA-VIVIANI: In conversations with the newer geophysicists at UH, it mentions that the likelihood given the geologic history of the area, I have some concerns because RAM is based on an assumption of what the architecture of the subsurface is like and that's heavily based on O'ahu's geology, so applicability of that method for the geology of that location may not be appropriate. Offline and anecdotally, and this should be verified, I was told that the presence of a deep confined aquifer would actually reduce the sustainable yield. The drilling of a deep monitor well could be more complicated in such a geologic setting, so I would just want to make sure, I'll just say between UH and USGS there are very strongly differing opinions on whose conceptual model is correct. I would not pick one over the other and the issue of the deep confined aquifer can be super contentious, but just make sure that that's folded into consideration when in this setting. Sometimes the deep confined aquifer distracts us from the fact that most of what we care about is actually pretty shallow. This is not straightforward, that's all I'm saying and getting all the Commission's best brains around it would be wise despite the strong political pressure to move things fast.

DEPUTY KAHAHANE: It is timely to have a discussion about how we are going to revise sustainable yields in Lahaina and how this is perhaps an opportunity to fold in some of the things that we had not previously considered in setting sustainable yields such as discharge to the coast.

COMMISSIONER KAGAWA-VIVIANI: Also the dependence of the region on surface water because it's well known that the lens is thin [inaudible] style shafts developing high up are very dependent on impounded water. RAM really - and Dr. Scheuer has made me more aware of this- it really emphasizes the basal and that's actually not the most important sort of resource. I want to say resource but it is important for the coastal springs and the coastal ecosystem just as in Kona. Our geology across every island, different parts of the island are so different, so just making sure we don't run to a solution without thinking about whether that's the right tool for the right setting. I'll chew on that one more if I have any ideas or recommendations on people to reach out to.

DEPUTY KAHAHANE: Great, that would be good and we can talk more about the discussions. They've already had two meetings of a working group on devising a strategy for revising sustainable yields. We can chat more offline.

COMMISSIONER KAGAWA-VIVIANI: Is that more generally or specific for Lahaina?

DEPUTY KAHAHANE: The discussion has been specific to Lahaina. I don't think I was clear, under phase one of the study USGS is going to construct a numerical model of Lahaina aquifer sector and that'll incorporate more complex conditions. I will have to check on whether we're contemplating deep confined high-level things like that besides just basal.

COMMISSIONER KAGAWA-VIVIANI: I don't think it's verified but I guess somebody who I trust said that they might be likely, but I don't know if those measurements have been...I'm not a geophysicist but I'm geophysics adjacent. I think I can inquire and find out more if there's documented information.

PUBLIC TESTIMONY

JONATHAN SCHEUER: Aloha mai kākou, Commissioners. I often testify in front of you on behalf of a client. Occasionally, I observe your discussions and just want to testify in front of you as a colleague who's followed water policy in Hawaii now for not quite as long as Dr. Miike but approaching. I have spent a lot of time thinking about how the Commission defines hydrologic units and sets sustainable yields and so my comments are in reference to this item, particularly the idea that we should spend time and resources redrawing the boundary lines within Central Maui. There are potentially profound policy implications for how those lines are drawn, so the point I want to raise for you is this. The code requires you to set hydrologic boundary lines conforming as near as possible to a hydrologic basin. It's not really optional, you guys are supposed to set up doing things along hydrologic units. We could have a robust argument if at the time that the Code was framed and the language that probably originally comes from the model Water Code, if they really understood the complexity of the geology of different areas of Hawaii and whether that's a good guidance or bad guidance, but that is the guidance that you have. Your guidance, however on sustainable yields is much more flexible. Sustainable yields to quote the Code means, the maximum rate at which water may be withdrawn from a

water source without impacting the utility or quality of the water source as determined by the Commission, how much can you suck out of the ground. The policy choices made by this Commission, you and your predecessors over the last almost 40 years, have been to focus on one element of sustainability, albeit a very important one, but the ability of an aquifer to sustain potable water withdrawal for consumption. I cannot emphasize this next point enough that is a very important but not at all the only thing that should be sustained by ground water and the entire framework. I really appreciate the brilliance and hard work of the very small ground water staff that you have, but the way that it has been implemented by focusing only on drinking water quality by using RAM or RAM 2 by assuming everything is a basal aquifer and by adopting assumptions that are obviously untrue on their face. Assumptions like wells are evenly spaced across the landscape of identical depth and of identical pumping rates, rainfall and all other recharge is identical across the entire hydrologic unit, which you only have to stand on our dry areas of the coast and look mauka to know that that is not true. When you set sustainable yields that way, you end up sacrificing really important things that we're supposed to sustain. It is possible to set hydrologic basins but begin a discussion of setting sustainable yields that doesn't just consult with one group and one value set on what it is that you wish to sustain but has a much more robust discussion grounded in public trust grounded in the history of Hawaii, the legal and cultural history and political history of Hawaii. That starts from what are all the things that we wish to sustain and then sets yields based upon sustaining all of those things. If something has led to decades of conflict around Hawaii is this seemingly technical and confusing thing. You know for a lot of people, not everybody, but once you say RAM their eyes gloss over, they're like, oh it's a model, it's too hard to go into. And I say that because I was one of those. I just kind of took it until I actually had to write a book chapter about it. I was like, okay RAM, and then once I read into it, it's like oh my gosh this is really important to know and the policy and on the ground consequences for resources of these decisions are massive. My deep caution for you is in this funding priority on redrawing the lines in Central Maui is twofold, one is given the complexity of the geology of most areas of Hawaii, including Central Maui, one set of lines will probably end up being just as arbitrary as the current lines, but arbitrary in different ways with advantages to different people. Secondly, if all you think about is how you're drawing the lines and not about how you're approaching sustainable yield, you will set up the foundations of future decades of controversy that won't serve our people well. Again, just my mana'o as an individual. Thanks for listening to me.

CHAIR CHANG: I always appreciate your sharing based upon your years of experience and trying to be more proactive. Thank you.

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D. ANNOUNCEMENTS

Application Deadline for Two CWRM Commissioner Appointments – March 31, 2025
<https://files.hawaii.gov/dlnr/cwrn/notice/2025/nt20250128.pdf>

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E. NEXT COMMISSION MEETINGS (TENTATIVE)

March 18, 2025 (Tuesday)

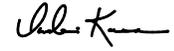
April 28, 2025 (Monday)

The meeting adjourned at 1:05 p.m.

February 18, 2025

Minutes

Respectfully submitted,



'IWALANI KAAA
Commission Secretary

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/>